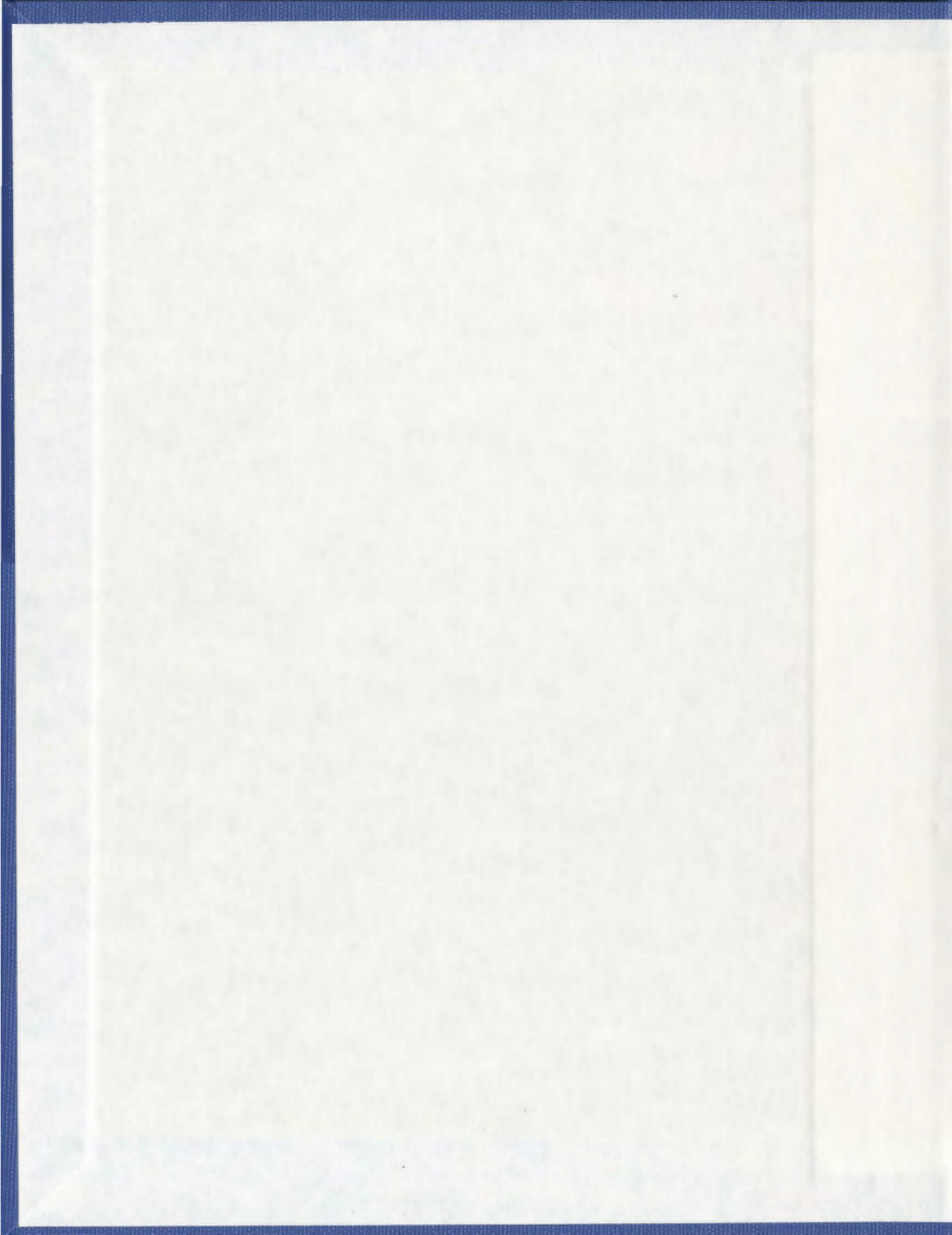


ON QUIRKY OBLIQUE SUBJECTS AND ECM  
COMPLEMENTATION IN ICELANDIC

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ICELANDIC

by

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## ABSTRACT

The syntactic position occupied by ECM complements is highly debated in the literature with no definitive answer currently available. This is problematic since the unknown nature of the position obscures our understanding of a universal theory of syntax. This thesis examines the debate through the lens of the Icelandic language which exhibits a cross-linguistically rare phenomenon termed Quirky Case, or *Aukafallsfrumlag* in Icelandic scholarship, whereby speakers can employ oblique forms in subject position. This mismatch of morphological case and grammatical function, evident in the Icelandic language, is therefore an ideal environment within which to explore the contested nature of exceptionally case marked nouns. It will be shown that there are certain height constraints associated with Quirky vs. non-Quirky ECM movement. By unifying the notions of Quirky case, Object Shift, and Exceptional Case Marking, novel insight into the universal relationship between case and syntactic position will be made – shedding more light on the illusive nature of the ECM complement position.

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## CHAPTER 1

# INTRODUCTION

This thesis is an examination of QUIRKY CASE assignment in Icelandic and its effect on EXCEPTIONAL CASE MARKING (ECM) constructions. By placing the Quirky case phenomenon within the context of a modern linguistic approach, it is my aim to contribute to the discussion of Universal Grammar as an “all encompassing theory of languages and the expressions they generate” (Chomsky 1993) by bringing new evidence to bear on the schism between morphological case and grammatical function as seen in the Icelandic language.

Through an empirical discovery exposing a word order difference between Quirky versus Non-Quirky subjects embedded below ECM verbs, I intend to expand upon the growing debate in the literature dealing with Exceptional Case Marking. It has been unclear whether ECM complement DPs should be considered subjects of lower complement clauses or objects of higher matrix clauses. Their grammatical role as either a subject of the lower clause or object of the higher clause (via *subject-object* raising) is highly contested in the literature, and no definitive answer seems available. Though it is evident that there must be a clause boundary that would normally delineate a DP’s lower-subject or upper-object status, the nature of this boundary might be better understood if the exact position of an ECM verb’s complement was fully discernible. In order to

resolve the question, a means of illuminating the illusive qualities of this position must be devised – leaving the door open for novel innovations in the debate.

By examining Icelandic ECM, Object Shift (Object Shift), and Quirky constructions as a foundation, it is possible to design syntactic structures that position Quirky DPs within ECM contexts. From this information, new conclusions are exposed concerning the effects oblique subjects have on ECM verbs and vice-versa. For example, a standard non-Quirky embedded DP is able to raise out of an embedded ECM clause. If this same result is tenable when a Quirky predicate is embedded under an ECM verb we will arrive at an interesting conclusion: despite the lexical case assigned to the ECM argument in the lower clause, it is able to surface in the matrix clause. However, if a Quirky ECM argument is unable to raise to the matrix clause, we will also arrive at an interesting result: namely, that there is something about the nature of Quirky DPs that restricts the height of their movement out of the ECM complement position. This will help to elucidate the nature of the complement position associated with these constructions and will also provide a new body of data from which future research will be possible.

Opposing the standard raising to object analysis of ECM complementation, I show that Icelandic ECM movement is actually a sub-type of Object Shift – a theory bolstered by the fact that the same restrictions on main clause Object Shift also apply to ECM movement. This theory is supported via a novel constraint on movement from a primary functional specifier position to a secondary functional specifier position.

The Icelandic language is an ideal testing ground for the morpho-syntactic phenomena in question due to its rich system of overt case marking. Unlike most other Germanic languages<sup>1</sup> where case is represented on determiners or certain pre-nominal arguments, in Icelandic all nouns, adjectives, and quantifiers display case morphology – either in the form of a suffix or otherwise. This means that there will be no possibility for confusion when faced with potential case ambiguities. Likewise, long distance agreement relations between clauses will be straightforwardly identifiable thanks to this unique feature. Lastly, the unique Icelandic Quirky (oblique) construction provides a distinct opportunity for research into the universal problems posed by Exceptional Case Marking that is otherwise unavailable in other languages.

This thesis contributes to the longstanding debate surrounding the position of ECM arguments by examining the problem through the lens of the Icelandic Quirky Case phenomenon. As a result, new insights into the universal functions of Object Shift, morphological case, grammatical role, and syntactic position are revealed.

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<sup>1</sup> The exception to this generalisation is Faroese; a language closely related to Icelandic that shares a similarly rich morphological case system. Syntactically, however, Faroese behaves more closely to the other Mainland Scandinavian languages (Faarlund 1990).



## CHAPTER 2

# QUIRKY CASE IN ICELANDIC

The Icelandic language is a member of the Germanic branch of the Indo-European family dating back over 1000 years to Old Norse and has, due to its insular nature, been able to retain many characteristics that can only be found in Old Scandinavian (Holmberg and Platzack 1995) and Proto-Indo European (Barðdal & Eythórsson 2009). One of these ancient characteristics is a phenomenon called Quirky case.

Quirky case, or oblique subject, is formally defined in Levin and Simpson (1981) as “the displacement of structural case by non-nominative marking on subjects and non-accusative marking on objects”. Typically, in other languages, nominative case is reserved for use with subjects while the remaining oblique cases are found on non-subjects. This customary alignment of case and grammatical role<sup>2</sup> is displayed in (1a) followed by an improper alignment in (1b) below:

- (1) a. He loves her  
b. \*Him loves she

The fundamental element to note is that a cross-linguistic pattern of subject-nominative and object-accusative is demonstrated that represents the standard alignment

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<sup>2</sup> It should be noted that the customary alignment of case and grammatical role discussed throughout this thesis is centred around Nominative-Accusative languages like English and Icelandic which varies from that found in Ergative-Absolutive languages like Basque.



of case and grammatical function. The Icelandic language, however, allows for a mismatch of sorts between a noun's grammatical features and morphological case, as speakers do not have to use the nominative case with subjects and accusative case with objects when certain predicates are employed. This mismatch has serious implications for current syntactic theories of both case and transformational movement.

In Icelandic, as in many Germanic languages, there exist four nominal cases: Nominative, Accusative, Dative, and Genitive (abbreviated henceforth as: NOM, ACC, DAT, and GEN). Unlike most other Germanic languages (and many other languages for that matter), any one of these four available cases can appear on a subject – so long as the predicate employed requires a matching oblique (Quirky) subject. Below are four examples of such predicates:

(2) a. Mig vantar peninga

me<sub>ACC</sub> lacks<sub>QUIRKY</sub> money<sub>ACC</sub>

*I need money*

b. Honum líður vel

Him<sub>DAT</sub> feels<sub>QUIRKY</sub> well

*He feels well*

c. Þeim hafa alltaf leiðst þessar bækur

Them<sub>DAT</sub> have always bored<sub>QUIRKY</sub> these books<sub>NOM</sub>

*They have always found these books boring<sup>3</sup>.*

<sup>3</sup> An additional gloss for this sentence is: *These books have always bored them*. However, it should be noted that no matter how the sentence is glossed in English, in Icelandic the subject remains the Quirky dative *þeim*.

d. Stórhriðarinnar gætti ekki í hellinum.

blizzard-the<sub>GEN</sub> was-noticeable<sub>QUIRKY</sub> not in cave-the<sub>DAT</sub>

*The blizzard wasn't noticeable in the cave.*

(Adapted from Thráinsson 2007)

Through a close inspection of these examples, it can be demonstrated that nominative case and subject position are not necessarily as closely linked as contemporary syntactic theories have posited (Chomsky 1993, Holmberg & Platzack 1995). Additionally, objects do not obligatorily take the canonical accusative form, as is typically assumed. Thus, the mismatch that remains between case and grammatical position merits further study.

It is important to note that the use of a canonical nominative argument in the subject position of a Quirky verb would result in an illicit grammatical construction. It is not possible for speakers of Icelandic to haphazardly alternate between nominative and oblique subjects, as each verb is lexically specified as being Quirky or non-Quirky – with the Quirky verbs being further specified with regard to which oblique case to employ. Thus, the construction containing a nominative subject in (3a) is deemed ungrammatical since the predicate *finna* requires that its subject be an oblique (in this instance Dative) DP<sup>4</sup> and object in the nominative case. This is contrasted with the correct alignment of case and grammatical role for Icelandic in (3b).

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<sup>4</sup> Throughout this thesis, DP (Determiner Phrase) will be used to denote all nominal arguments unless otherwise noted. While some theories differentiate between DPs and NPs (Noun Phrases), this distinction will not be relevant for this examination.

- (3) a. \*Hann finnst Harald skemmtileg

He<sub>NOM</sub> finds<sub>QUIRKY</sub> Harold<sub>ACC</sub> interesting<sub>ACC</sub>

- b. Honum finnst Haraldur skemmtilegur

\*Him<sub>DAT</sub> finds<sub>QUIRKY</sub> Harold<sub>NOM</sub> interesting<sub>NOM</sub>.

(Adapted from Thráinsson 2007)

In Icelandic, unlike English and many of the world's languages, a mismatch of morphological case and grammatical function is permitted. The environments within which this phenomenon is observed are lexically determined on a verb-by-verb basis, meaning that Icelandic predicates can be divided into two groups: non-Quirky nominative-subject verbs, and Quirky oblique-subject verbs. The Icelandic Quirky construction, displaying the transparent mismatch of case and function, will act as the foundation upon which I will build the analyses of my thesis. In order to properly establish this foundation, the discussion must now turn to determining the subject status of oblique subjects.

## 2.1 TESTING FOR SUBJECTHOOD

It is important to establish the fact that oblique subjects in Icelandic share syntactic properties with nominative subjects and not with oblique objects. This is intrinsic to any research conducted with oblique subjects, as it must be sufficiently proven that the discussion is solidly founded upon true subjects, and not, as is the case in certain languages with similarly styled constructions, underlying objects (Sigurðsson 2002). There are a number of ways to go about proving this notion, and in demonstrating

these through subjecthood tests it will also be possible to show how the oblique DPs in a language like German differ from true oblique subjects in Icelandic.

For the purposes of this discussion, I will demonstrate eight types of subjecthood tests while keeping in mind that the existing literature on this matter is quite extensive (Jónsson 1998; Sigurðsson 1989, 2002; Thráinsson 1979, 2007; Zaenen et al. 1985).

Just as it is possible to invert a non-Quirky subject and verb in yes/no questions (example (4a-b)), it is also possible to invert a Quirky subject with its predicate in these types of interrogative constructions (example (4c-d)).

(4) a. Stelpurnar hafa séð myndina

Girls-the<sub>NOM</sub> have seen picture-the

*The girls have seen the picture*

b. Hafa stelpurnar séð myndina?

Have girls-the<sub>NOM</sub> seen picture-the

*Have the girls seen the picture?*

c. Stelpunum leiddist í skólanum

Girls-the<sub>DAT</sub> bored<sub>QUIRKY</sub> in school-the

*The girls were bored in school*

d. Leiddist stelpunum í skólanum?

Bored<sub>QUIRKY</sub> girls-the<sub>DAT</sub> in school-the

*Were the girls bored in school?*

Since Icelandic is a V2 language, when topicalisation moves some argument to the head of the phrase the verb will remain in the second position. This means that the



subject will now be forced to occupy a third position directly following the verb. This is the case for non-Quirky and Quirky subjects as evidenced from the example below.

- (5) a. Í gær fór ég til Íslands

Yesterday went I<sub>NOM</sub> to Iceland

*Yesterday I went to Iceland*

- b. Í gær vantaði hana peninga

Yesterday needed<sub>QUIRKY</sub> her<sub>ACC</sub> money

*Yesterday she needed money*

There is a definiteness restriction on subjects in expletive constructions such that only indefinite subjects can surface when the expletive *það* is inserted at the head of the sentence. Interestingly, this restriction applies to both Quirky and non-Quirky subjects equally.

- (6) a. Það át \*álfurinn/einhver álfur ostinn

There ate \*elf-the<sub>NOM</sub>/some elf<sub>NOM</sub> cheese-the

- b. Það býður \*stelpunum/einhverjum við setningafræði

There loathes<sub>QUIRKY</sub> girls-the<sub>DAT</sub>/somebody<sub>DAT</sub> against syntax

In Icelandic there is a separate set of third person pronouns that must be anaphorically bound by a subject. These subject-oriented reflexive pronouns (*afturbeygð fornöfn: sig, sér, and sín*) can take both canonically case marked and Quirky subjects as their antecedents.

(7) a. Hún<sub>i</sub> sá myndina sína<sub>i</sub>

She<sub>NOM</sub> saw picture-the her.own

*She saw her own picture*

b. Henni<sub>i</sub> leiðist bókin sín<sub>i</sub>

Her<sub>DAT</sub> finds.boring<sub>QUIRKY</sub> book-the her.own

*She finds her own book boring* (Boeckx 2000)

Additionally, oblique subjects can also act as antecedents to reflexives embedded in lower clauses, i.e. long distance reflexives.

(8) Hana<sub>i</sub> grunar að þú elskir sig<sub>i</sub>/\*hana<sub>j</sub>

She<sub>ACC</sub> suspects<sub>QUIRKY</sub> that you love her

In conjunction reduction environments the second of two co-referent subjects can be deleted under identity with the first. This is possible when a structurally or lexically case marked subject begins the phrase deleting either a Quirky or non-Quirky lower subject. Four possible scenarios are outlined below.

- (9) a. Hún horfði og (hún) sá myndina

She<sub>NOM</sub> watched and (she<sub>NOM</sub>) saw picture-the

- b. Hún var syfjuð og (henni) leiddist bókin

She<sub>NOM</sub> was sleepy and (her<sub>DAT</sub>) found.boring<sub>QUIRKY</sub> book-the

(Boeckx 2000)

- c. Stelpunum leiddist í skólanum og (þær) fóru heim

Girls-the<sub>DAT</sub> got.bored<sub>QUIRKY</sub> in school-the and (they<sub>NOM</sub>) went home

- d. Hún eyðir miklu og (hana) vantar alltaf peninga

She<sub>NOM</sub> spends much and (her<sub>ACC</sub>) needs<sub>QUIRKY</sub> always money

(Thráinsson 2007)

Exceptional Case Marking (ECM) verbs such as *believe* and *consider* do not take full CP complement clauses, instead embedding “defective” TP clauses (Chomsky 2001, Lasnik 1998, and Lasnik & Saito 1999). Therefore, the subjects of the embedded TP clause typically surface with an exceptional accusative case supplied by the matrix verb. However, when a Quirky predicate is embedded under an ECM verb the oblique subject is permitted to surface despite retaining its lexically assigned case. Although the implications of a Quirky subject in embedded ECM environments will be taken up in greater detail below, for now it will be used to demonstrate the subject properties of Quirky nominals.

- (10) a. Við teljum þá hafa sofið

We believe them<sub>ECM-ACC</sub> to.have slept

- b. Þeir töldu henni líða vel

They believed her<sub>DAT</sub> to.feel<sub>QUIRKY</sub> well

In control infinitive constructions, PRO must be c-commanded by a subject to its left. As is evident from the following examples, a licit c-commanding subject can license both a Quirky and non-Quirky PRO in the specifier position of the non-finite embedded verb.

- (11) a. Hún<sub>i</sub> vonast til [að PRO<sub>i</sub> sjá myndina]

She<sub>NOM</sub> hopes for to PRO<sub>NOM</sub> see picture-the

*She hopes to see the picture.*

- b. Hún<sub>i</sub> vonast til [að PRO<sub>i</sub> leiðast ekki í skólanum]

She<sub>NOM</sub> hopes for to PRO<sub>DAT</sub> be.bored<sub>QUIRKY</sub> not in school-the

*She hopes to not be bored in school.*

(Boeckx 2000)

Subject-to-subject raising occurs when verbs like *seem* or *appear* surface as matrix verbs. In these types of constructions the subject of the lower clause is raised to become the subject of the entire phrase leaving a c-commanded trace of itself in the specifier position of the embedded non-finite verb. The following examples highlight the fact that both canonically case marked as well as Quirky nominals can undergo subject-to-subject raising. This reinforces the position that Quirky subjects do in fact behave just as their non-Quirky counterparts.



- (12) a. Hún<sub>i</sub> virðist t<sub>i</sub> hafa séð myndina

She<sub>NOM</sub> seems to.have seen picture-the

- b. Henni<sub>i</sub> virðist t<sub>i</sub> hafa leiðst bókin

She<sub>DAT</sub> seems to.have found.boring<sub>QUIRKY</sub> book-the (Boeckx 2000)

As is shown by the complementary sets of non-Quirky and Quirky sentences above, Quirky subjects do indeed behave similarly to their structural (non-Quirky) subject counterparts. Therefore, it is only fitting to consider these oblique nominals as true subjects (Sigurðsson 1989; Thráinsson 1979, 2007; Zaenen et al. 1985).

## 2.2 OBLIQUE SUBJECT-LIKE DPs VS. TRUE QUIRKY SUBJECTS

Turning now to briefly examine subject-like non-nominative arguments found in other languages, it will be demonstrated that true Icelandic Quirky subjects differ from fronted objects. By making this distinction it will become clear that Quirky Icelandic nominals are true subjects. In German, for example, oblique arguments sometimes surface in a typically canonical subject position. Thus, both the Icelandic sentence in (13a) and the German sentence in (13b) may appear to employ Quirky oblique subjects – since both sentences begin with dative pronouns in the leftmost position of the sentence.

- (13) a. Honum var hjálpað. (Icelandic)

- b. Ihm wurde geholfen. (German)

Him<sub>DAT</sub> was helped. (Zaenen et al. 1985)

However when the subjecthood tests discussed above are applied, two distinctively different results will surface identifying the Icelandic dative pronoun as the

only true subject. In (14) we can see how Icelandic and German differ when a Quirky predicate is embedded in a control environment.

- (14) a. Mér var hjálpað (Icelandic)

Me<sub>DAT</sub> was helped<sub>QUIRKY</sub>

- b. Ég<sub>i</sub> vonaðist til að PRO<sub>i</sub> verða hjálpað

I<sub>NOM</sub> hoped for to PRO<sub>DAT</sub> be helped<sub>QUIRKY</sub>

- c. Mir wurde geholfen (German)

Me<sub>DAT</sub> was helped

- d. \*Ich<sub>i</sub> hoffte PRO<sub>i</sub> geholfen zu werden

I<sub>NOM</sub> hoped PRO<sub>DAT</sub> helped to.be

*I hoped to be helped*

(Sigurðsson 2002)

From this example it is clear that a Quirky construction containing a true subject is permitted under a control predicate, whereas the ungrammatical German example in (14d) leads us to consider oblique subject-like arguments in this language as simply that: subject-like but not true subjects.

Furthermore, German oblique subject-like nominals are unable to be deleted under coordination with a higher co-referential subject.

- (15) a. Ég<sub>i</sub> hafði mikið að gera og (mér<sub>i</sub>) var samt ekki hjálpað

I<sub>NOM</sub> had much to do and (me<sub>DAT</sub>) was nonetheless not helped<sub>QUIRKY</sub>

- b. \*Ich<sub>i</sub> hatte viel zu tun, und (mir<sub>i</sub>) wurde trotzdem nicht geholfen

I<sub>NOM</sub> had much to do and (me<sub>DAT</sub>) was nonetheless not helped

(Sigurðsson 2002)

From this brief analysis it is clear that some languages possess constructions superficially similar to the Icelandic Quirky phenomenon. However, when investigated closely, these non-nominative subject-like arguments do not pass the numerous syntactic tests for subjecthood, and instead are found to behave more closely to what can only be described as fronted objects (Sigurðsson 2002). This affirms the stance that Quirky oblique subjects in Icelandic represent a class of true subjects.

Having established the subject status of Quirky DPs in Modern Icelandic, we can now proceed to a discussion of the syntactic framework required for a thorough examination of Quirky ECM complementation.

## CHAPTER 3

# EXCEPTIONAL CASE MARKING

The problem posed by Exceptional Case Marking is centred around an apparent mismatch of morphological case and grammatical function. In order to proceed confidently, it is first necessary to introduce the structural assumptions upon which the remainder of this thesis is based: the VP-shell structure.

### 3.1 THE VP-SHELL ANALYSIS

Following Larson (1988), X-bar structure (Chomsky 1970) is essentially broken down into the following two rules:

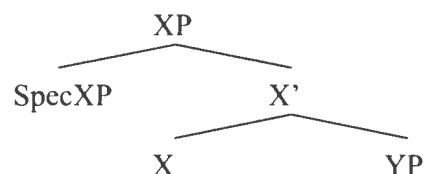
$$(16) \text{ a. } XP \rightarrow \text{Spec}XP \ X'$$

$$X' \rightarrow X \ YP$$

In this schematic  $X$  can represent any of the syntactic categories (Noun, Verb, Adjective, and so forth);  $\text{Spec}X'$  is a position reserved for subjects; and  $YP$  represents the *complement* (object) position. What is important to realize about this underlying representation of syntactic structure is “a fundamental structural asymmetry between subjects and objects” (Larson 1988). Because subjects occupy the  $\text{Spec}XP$  position and objects a position within  $YP$ , objects will always be subordinate to subjects. This notion is demonstrated in (17) below:



(17)



This transitive relation is further stipulated by two principles that control the process of predication. The first principle, given in (18), strengthens the link between predicates and their arguments.

- (18) Principle 1: If  $\alpha$  is a predicate and  $\beta$  is an argument of  $\alpha$ , then  $\beta$  must be realized within a projection headed by  $\alpha$ . (Larson 1988)

This principle states that the initial syntactic position of an argument must be within the X-bar projection of the predicate from which it receives a theta-role (Larson 1988). Therefore, every predicate ( $X$  position) may project a subject/specifier (*SpecXP*) and object/complement (*YP*) position. These positions can then be directly linked to specific thematic roles determined by a thematic hierarchy AGENT > THEME > GOAL > etc. (Larson 1988).

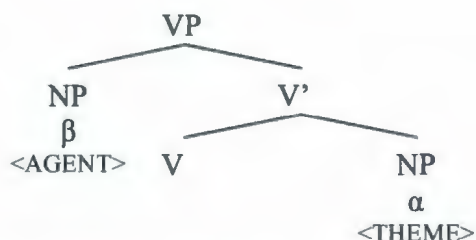
The second guiding principle of predication addresses the pairing of theta-role and argument position.

- (19) Principle 2: If a verb  $\alpha$  determines  $\theta$ -roles  $\theta_1, \theta_2, \dots, \theta_n$ , then the lowest role on the thematic hierarchy is assigned to the lowest argument in the constituent structure, the next lowest role to the next lowest argument, and so on. (Larson 1988)

Following from this second principle we can associate the relative height of an argument within a given predication with the thematic role it will be assigned. This also suggests a

one-to-one relation between the number of theta-roles a predicate assigns and the number of argument positions required, since every theta-role must be assigned a different position within which to be realized. This is outlined in (20) from Larson (1988) below.

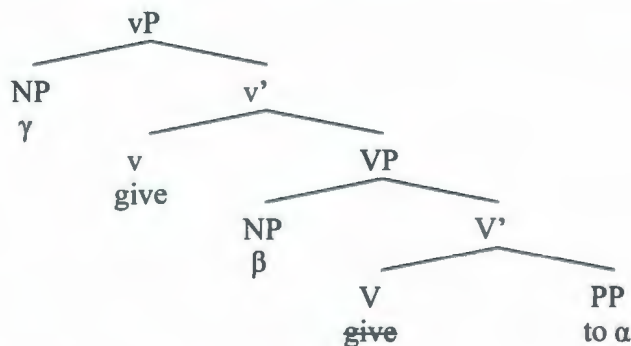
(20)



This notion has interesting implications for the underlying structure of predicates that assign more than two theta-roles because if all structures are binary in nature, how can one predicate be linked to three argument positions?

The notion of a VP-shell structure (Larson 1988) takes predicates like *give*, which govern more than two argument positions, into consideration. This theory sees the VP becoming a complement to a syntactically higher empty-headed 'shell' termed vP.

(21)

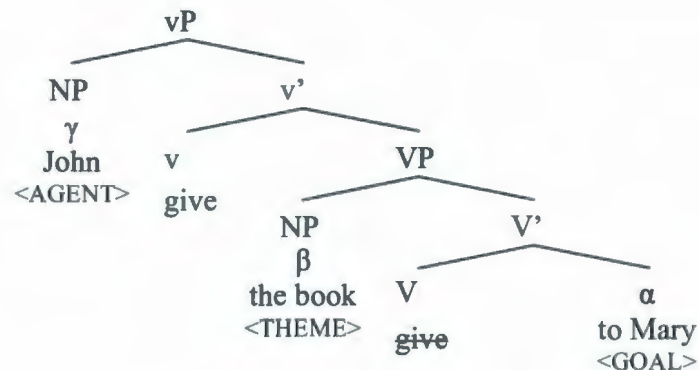


As we can observe from (21), an additional argument  $\gamma$  becomes available in the specifier position of the higher VP-shell allowing for three arguments and theta-roles to be associated with a single predicate – thus satisfying Principle 1. This is possible via head

movement which raises *give* from the head of VP to that of vP, putting  $\gamma$  within the domain of the predicate.

With the addition of a new argument position comes a restructuring of the relative positional hierarchy and theta-roles. Following the thematic hierarchy and Principle 2, the new external argument,  $\gamma$ , now constitutes the highest position associated with the predicate *give*. Therefore, it will serve as an A-position for the agent theta-role and will serve as the grammatical subject. Consequently, the remaining two argument positions,  $\beta$  and  $\alpha$ , will be adjusted to theme and goal theta positions respectively. This notion is exemplified below in (22).

(22)



### 3.2 ECM COMPLEMENTS: SUBJECTS OR OBJECTS?

We can now turn to examine the contested nature of Exceptional Case Marking (ECM) constructions and their exceptionally case marked DPs. This exceptional case is assigned to arguments that are c-commanded by ECM verbs such as *believe* and *consider*.

In the following example, the ECM verb is responsible for assigning case to the complement pronoun *him*.

- (23) I believe *him* to have persuaded John.

These post-verbal DPs, like Quirky nominals found in Icelandic, appear to display a mismatch of case and grammatical role. This statement needs qualification however since the (mis)match for these DPs is completely dependent upon the analysis assumed by the reader. If we consider *him* to belong to the matrix clause then the DP will take the grammatical role of object. In this instance, the oblique case and object status of the pronoun align, and we are left with a problem-free outcome (though this apparent alignment does not take into consideration the whole picture, as will be discussed in greater detail). However, if we consider *him* to belong to the lower clause then it will necessarily take on the grammatical role of subject. This is problematic because we are now faced with a mismatch of case and grammatical role reminiscent of that found in Icelandic. Therefore, we must now examine the arguments for both subjecthood and objecthood in order to proceed with the investigation.

Lasnik (1998) offers two sets of arguments on this matter: one for the subject status of ECM DPs and a second for object status. Beginning first with evidence for the subject status of these DPs, we discover that there is a great deal of “synonymy between infinitival embedding and finite embedding” (Lasnik 1998). This semantic synonymy is displayed below as we see that the embedded infinitival clause in (24a) and embedded finite clause in (24b) convey quite similar meanings:



(24) a. I believe *him* to have convinced John.

b. I believe that *he* convinced John.

If we consider *he* to be the subject of the lower clause in (24b) than through analogy we might equally expect it to be the subject of the lower clause in (24a).

The second argument for a lower-clause subject status comes from an ECM DP's ability to be replaced by the expletive *there*:

(25) a. I believe *a man* to be in the garden.

b. I believe there to be *a man* in the garden. (Lasnik 1998)

If this DP were a true object it would be impossible to replace it with the expletive since Safir (1993) argues that the expletive *there* can only occur in the subject SpecTP position. Following from this, we have good reason to believe that the subordinate argument of an ECM verb must therefore be located in the specifier position of a separate TP – and must necessarily be a subject. However, as we turn to examine the arguments for higher-clause object status, we will discover that this state of affairs is equally as compelling.

Lasnik (1998), citing Postal (1974), offers three “traditional arguments” capable of displaying the object-like properties of the ECM DPs in question: passivization, reflexivization, and reciprocal marking. These three processes involve subject-object relations and are therefore able to highlight a DP's object status.

Via A-movement, passivization works to place “the expression which serves as the complement of an active verb...as the subject in a corresponding passive construction” (Radford 2004). Thus, it is possible to test the object status of an argument based on its ability to be passivized:



(26) a. I believe *him* to be foolish

b. *He* is believed to be foolish by me

Here we see how the italicized verbal complement in (26a) can be made a subject when passivized in (26b) - this highlights the underlying object status of the pronoun.

Reflexivization can be employed to further test a DP's object status, as this process "typically establish[es] a relation between an object position and a subject position" (Lasnik 1998). In order for any anaphoric relationship to be grammatical the reflexive pronoun must be bound by an appropriate c-commanding antecedent – in this case a subject DP.

(27) He<sub>i</sub> believes *himself<sub>i</sub>* to be smart.

Here we see the subject *he* c-commanding what must apparently be an object *himself*.

Similarly, the third test also involves an anaphoric relationship that must be established between a subject and object.

(28) We believe *each other* to be smart.

Comparable to example (27) above, the reciprocal anaphor *each other* represents the bound object in (28).

As a result of these two sets of tests, we are faced with convincing evidence for both a lower-clause subject and higher-clause object status for the DPs under investigation. Similarly to the Quirky case DPs found in Icelandic, these ECM nominals display a mismatch of grammatical role and morphological case. If, following the first set of arguments, we consider the DPs to be underlying subjects of a lower clause then we are faced with the problem of accounting for their object-like characteristics displayed

in the latter set of arguments. Likewise, if we take the DPs as objects of the higher matrix clause, we must then account for their subject-like qualities discussed in the former set of arguments. This is problematic since the unknown nature of the position is troublesome not only to our understanding of English syntax but also to any universal theory of syntax.

### 3.3 DETERMINING THE HEIGHT OF ECM COMPLEMENTS

It is evident that there must be a clause boundary which would normally delineate the line between a DP's upper-object or lower-subject status; the nature of which might be better understood if the exact position of an ECM verb's complement was fully discernible. In order to resolve the question, a way to illuminate the illusive qualities of this position must be devised.

One possible way to explore the position of this boundary is through a test involving the height of adverbs and adverbial phrases. It is possible to insert an adverb into a sentence and make judgments regarding its underlying syntactic position based on scope. If the adverb is seen to modify the predicate of the higher clause then it can be assumed that everything contained therein must be a part of that same higher clause. However, if the adverb modifies the verbal phrase of the lower clause then the opposite is true – everything positioned between the adverb and the lower predicate will necessarily be a part of the same clause. Therefore, it is possible to use this test to determine the constituency of ECM complements.

(29) a. [They believe him *sincerely*] to have lied.

b. They believe him [*sincerely* to have lied.]

If the adverb *sincerely* is taken as modifying the matrix verb *believe* then we know that the pronoun *him* must be positioned within the higher clause – (29a). This would give convincing evidence for the DP's higher-clause object status. However, if *sincerely* modifies the lower predicate then we are left with the possibility of *him* belonging to either the higher or the lower clause – (29b).

Thanks to the rich morphology of the Icelandic language, this technique can be further developed below in example (30):

(30) [Þeir<sub>i</sub> töldu Harald<sub>j</sub> allir<sub>i</sub>] vera heimskan<sub>j</sub>.

They<sub>NOM/PL/M</sub> believed Harold<sub>ACC</sub> all<sub>NOM/PL/M</sub> to.be stupid<sub>ACC</sub>

*They all believed Harold to be stupid.*

In this example from Thráinsson (2007), the quantifier *allir* agrees in number, case, and gender with the matrix subject *þeir*. In order for this agreement to be possible with *allir*, the matrix clause must extend to at least this position, meaning that everything in between these two points must also be included in the higher clause. Thus, we are faced with an Icelandic example that seems to support the raising to object approach to the problem.

Binding effects can also be used to determine the position of ECM complements based on the need for anaphors to be properly c-commanded by their antecedents. “Given usual assumptions, the antecedent of a reciprocal must bear a command relation to the

reciprocal, c-command, for example” (Lasnik & Saito 1999). In the following example potential binding environments are explored.

(31) a. \*Perry proved [that they had been framed] during each other’s trials.

b. Perry proved them<sub>i</sub> [t<sub>i</sub> to have been framed] during each other<sub>i</sub>’s trials.

(Adapted from Branigan 2000)

The ungrammaticality of sentence (31a) is due to an improper binding relation. In this instance, the subject *they* attempts to bind “an anaphor...which it does not c-command from the [SpecIP] position within the embedded clause” (Branigan 2000). However, in example (31b) we see that a licit binding relation is established. This is possible if we assume that the ECM complement *them* has raised either overtly or covertly out of the embedded lower clause to a position in the main clause. Thus, a proper c-commanding relation is achieved whereby *them* and its bound reciprocal anaphor *each other* are located in the same (matrix) phrase. From this additional test we are faced, once again, with evidence for a raising to object type approach to the ECM debate. More importantly at this stage however, we have seen how these types of tests are able to determine whether an ECM complement belongs to a lower embedded clause or a higher matrix clause.

Having established a set of tests capable of identifying (but not necessarily describing) the boundary between the upper ECM and lower complement clauses, the discussion must now revert to Icelandic Quirky case once more. This will allow us to examine the novel syntactic consequences of placing Quirky DPs within ECM contexts, shedding more light on the nature of the ECM complement position.



## 3.4 QUIRKY CASE AND EXCEPTIONAL CASE MARKING

The verbs *telja* and *álíta*, corresponding to the English verbs *believe* and *consider* (Hólmarsson et al. 2004), exemplify Exceptional Case Marking predicates in Icelandic. As in English, these verbs take accusative marked arguments as their complements. This has been displayed below where we see how a typical subject-verb-object sentence in (32a) is capable of being embedded under an ECM verb in (32b).

(32) a. Álfurinn hefur borðað ostinn

Elf-the<sub>NOM</sub> has eaten cheese-the

*The elf has eaten the cheese.*

b. Ég tel álfinn hafa borðað ostinn.

I<sub>NOM</sub> believe elf-the<sub>ECM-ACC</sub> to.have eaten cheese-the

*I believe the elf to have eaten the cheese.*

(Adapted from Thráinsson 2007)

It should be highlighted here that, as in English, the ECM complement *álfinn* receives accusative case morphology as a direct result of being c-commanded by the ECM verb *telja*.

So far the Icelandic situation concerning Exceptional Case Marking appears to be quite similar to that found in English. We must now turn to consider the effects an ECM predicate will have on a Quirky verb. One of two results will surface: either the ECM verb will rule out any lexical case assignment that the Quirky verb would normally require, or the Quirky verb's lexical case will overrule the obligatory accusative case of the higher ECM verb.



The examples in (33) display Quirky predicates that have been embedded under ECM matrix verbs. As is quite evident from these sentences, the Quirky case of the italicized pronouns has overruled the accusative case assignment expected from the ECM verbs.

- (33) a. Ég tel *honum* vera vorkunn

I believe him<sub>DAT</sub> be pity<sub>QUIRKY</sub>

*I believe that he can be forgiven.*

- b. Ég álít mannsins hafa verið saknað lengi.

I consider man-the<sub>GEN</sub> have been missed<sub>QUIRKY</sub> long

*I consider the man to have been missed for a long time.*

Thus, we arrive at the conclusion that “although the ECM verbs govern accusative, the oblique subjects keep their lexically assigned case (dative, genitive)” (Thráinsson 2007). This finding could be used as an argument against a raising to object account of ECM complements, since we would imagine the ECM verb to assign its accusative case to all DPs under this view – overruling any other case assignments.

Having established this hierarchy (Quirky case assignment > ECM case assignment), attention can now be turned to a closer analysis of the nature of the ECM verb’s complement position. As discussed above, the position of this DP as either a subject of the lower clause or object of the higher clause (via subject-object raising) is highly contested in the literature with no definitive answer currently available.

Thráinsson (2007) gives the following example as a licit instance of Exceptional Case Marking in Icelandic (repeated from (30) above):

(34) [Þeir<sub>i</sub> töldu Harald<sub>j</sub> allir<sub>i</sub>] t<sub>j</sub> vera heimskan<sub>j</sub>.

They<sub>NOM</sub> believed Harald<sub>ECM-ACC</sub> all<sub>NOM</sub> to.be stupid<sub>ACC</sub>.

*They all believed Harald to be stupid*

By examining these types of sentences, it will be possible to make new conclusions concerning the effects oblique subjects have on ECM verbs and vice-versa. For example, since we know that the quantifier *allir* marks the rightmost boundary of the matrix clause, the non-Quirky ECM complement *Harald* situated to its left is necessarily positioned within the matrix clause as well. The question now becomes what type of movement operation raises the ECM argument into a matrix clause position to the left of the in situ subject quantifier? Perhaps an even more important question is will a Quirky ECM argument behave in the same manner? Because if it does then it means that despite the lexical case assigned to the ECM argument in the lower clause, it is still able to surface in the matrix clause. However, if a Quirky ECM argument is unable to be raised in the same way as a non-Quirky DP, then it means that there is something about the nature of Quirky subjects that restricts the height of their movement out of the ECM complement position. In order to gain a more comprehensive understanding of the movement of these types of verbal complements, it is necessary to take up a discussion of Scandinavian Object Shift.

## CHAPTER 4

### OBJECT SHIFT AND HOLMBERG'S GENERALISATION

The movement of Quirky versus non-Quirky ECM complements in Icelandic can be used to shed new insight on the Exceptional Case Marking Debate. As a means of further investigating these nominal movements, the discussion will turn to the theory of Object Shift.

Object Shift is a process that takes VP-internal object DPs and moves them to higher VP-external positions. This is exemplified in Swedish by Holmberg (1999) below, where we see that the object pronoun *henne* has undergone Object Shift:

- (35) Jag kysste henne<sub>i</sub> [<sub>VP</sub> inte t<sub>i</sub>]

I kissed her not

In the Scandinavian languages, including Icelandic, Object Shift “is dependent on verb movement in the sense that an unmoved verb will always block Object Shift” (Holmberg 1999). This “interplay” of verbal movement and Object Shift is what has come to be known as “Holmberg’s Generalisation” (HG). Thus, (35) is more accurately analyzed as (36) below where the movement of the verb *kysste* has been noted.

- (36) [<sub>TP</sub> Jag<sub>i</sub> T' kysste<sub>j</sub> henne<sub>k</sub> [<sub>VP</sub> inte t<sub>i</sub> v' t<sub>j</sub> t<sub>k</sub>]]

I kissed her not

Following from HG we see that it is the initial V-to-T movement of the main verb that makes the subsequent Object Shift licit. Conversely, however, if an auxiliary surfaces in T, subsequent movement of the main verb from a position in a lower VP will be blocked resulting in an illicit environment for Object Shift. Two examples are contrasted below in (37) where only the pertinent movements have been shown.

- (37) a. [<sub>TP</sub> Jón<sub>i</sub> T' las<sub>j</sub> bækurnar<sub>k</sub> [<sub>VP</sub> ekki t<sub>i</sub> v' t<sub>j</sub> t<sub>k</sub>]].

John read books-the not

*John did not read the books.*

- b. \*[<sub>TP</sub> Jón<sub>i</sub> T' hefur bækurnar<sub>k</sub> [<sub>VP</sub> ekki t<sub>i</sub> v' lesið t<sub>k</sub>]]

John has books-the not read

*John has not read the books.* (Collins & Thráinsson 1996)

In sentence (37a) we can see that the verb *las* has undergone V-to-T movement, the subject *Jón* has raised from the specifier position of the lower VP to SpecTP, and lastly the object *bækurnar* has shifted to the left of the negator *ekki*. Since the negator delineates the leftmost boundary of the VP, we know that *bækurnar* has undergone Object Shift and now occupies a position external to the VP. Turning to the illicit sentence in (37b) we immediately notice the use of the auxiliary verb *hefur*, and that the main verb has remained in situ VP-internally. Because no V-to-T movement has occurred, the derivation crashes when the object attempts to precede the negator *ekki* – Object Shift is thus prohibited in this construction.

It should be highlighted that Object Shift is indeed leftward movement of a DP from its base VP-internal position, and not merely the result of rightward movement of

those constituents such as the negator or adjuncts that may surround the object. For example, the illicit sentence in (38) shows that these sorts of adjuncts cannot surface to the right of the predicate.

(38) \*Hann hefur verið hér aldrei

He has been here never

(Holmberg & Platzack 1995)

Following from this we know that in order for an object DP to occur to the left of such adjuncts it will have had to undergo leftward movement.

In the above examples a negator is used to mark the boundary of the VP, but this is not the only way in which to test object movement. Because “the base generated position of the subject is lower than the derived position of the object” (Collins & Thráinsson 1996), a floating quantifier associated with the subject can be employed to highlight any Object Shift that may occur. Due to the richness of Icelandic's case system, determining the grammatical relation between subject and in situ subject quantifier will be straightforward.



(39) a. Í gær hafa strákar<sub>i</sub> allir<sub>i</sub> málað húsið<sub>j</sub> rautt

Yesterday have boys-the<sub>NOM/PL/M</sub> all<sub>NOM/PL/M</sub> painted house-the red

*Yesterday all the boys have painted the house red.*

b. Í gær máluðu strákar<sub>i</sub> húsið<sub>j</sub> allir<sub>i</sub> t<sub>j</sub> rautt

Yesterday painted boys-the<sub>NOM/PL/M</sub> house-the all<sub>NOM/PL/M</sub> red

*Yesterday all the boys painted the house red.*

c. \*Í gær hafa strákar<sub>i</sub> málað húsið<sub>j</sub> allir<sub>i</sub> t<sub>j</sub> rautt

Yesterday have boys-the<sub>NOM/PL/M</sub> painted house-the all<sub>NOM/PL/M</sub> red

*Yesterday all the boys have painted the house red.*

(Collins & Thráinsson 1996)

Example (39a) contains an auxiliary verb which occupies the T position and necessarily blocks Object Shift from occurring. In this sentence, the quantifier *allir* is located to the immediate right of the subject with which it is associated and has not remained in situ. In example (39b), however, the object *húsið* has shifted to the left of the floating quantifier *allir*, which has remained VP internal. Evidence that the floating quantifier remains in the base position comes from Sportiche (1988). Since the quantifier is associated with the subject both morphologically and semantically, it “forms a constituent with the trace of the subject” (Collins & Thráinsson 1996). Therefore, we have solid evidence for the original subject position that in turn sheds light on the Object Shift operation that has taken place – shifting the object to a higher syntactic position. Finally in (39c), when Object Shift is restricted, due to the presence of an auxiliary in T, it is impossible for the

object *húsið* to occupy a position to the left of the in situ floating subject quantifier since this would require an Object Shift operation.

Having discussed two methods of detecting when Object Shift has taken place, we can now turn to examine the characteristics of Object Shift movement. In what follows, it will become clear that this movement operation is indeed a form of leftward movement and also shares properties of both A-movement and  $\bar{A}$ -movement.

#### 4.1 OBJECT SHIFT AS LEFTWARD MOVEMENT

Across the Scandinavian languages there are certain general restrictions on the types of DPs eligible for Object Shift. For example, in Mainland Scandinavian languages<sup>5</sup> the objects must be pronominal, while in Icelandic they may be full lexical DPs, but usually definite (Holmberg & Platzack 1995). Conversely, "the string of adjuncts...may consist of a single member, or be, in principle, infinitely complex" (Holmberg & Platzack 1995). This restriction on object DPs is demonstrated below in (40a) where the length of the shifted object can lead to awkward constructions. This is to be contrasted with (40b) where the number of adjuncts does not affect the acceptability of the sentence.

(40) a. ??Jón keypti bókina sem var með gölluðu kápunni ekki.

John bought book.the which had frayed covers not

b. Jón las hana sennilega ekki oft.

John read it probably not often

(Holmberg & Platzack 1995)

<sup>5</sup> The Mainland Scandinavian languages include Danish, Norwegian, and Swedish.

Holmberg and Platzack (1995) indicate that Object Shift can also affect ECM complement DPs.

(41) Börnin töldu Jón<sub>i</sub> ekki öll <sub>t<sub>j</sub></sub> vera heimskan.

Children-the believed John not all to.be foolish

*The children did not all believe John to be stupid.*

(Holmberg & Platzack 1995)

It is believed that the word order found in these types of phrases results from shifting the embedded subject leftward up into a position within the higher matrix phrase. This holds true since the negation *ekki* cannot be considered a constituent of the lower clause given this reading, and the quantifier *öll* (because it agrees with the matrix subject *börnin*) must also be positioned in the matrix clause. This rules out the possibility of any type of rightward movement, meaning that Object Shift must be considered a leftward movement operation affecting DPs.

The implications of this notion will be discussed in greater detail below. Briefly, however, this hypothesis sees a new mode of describing the movement which affects the subject of the subordinate infinitival phrase in ECM constructions. This is because the movement proposed by Holmberg and Platzack (1995) is not merely "a case of old-fashioned Raising to Object" (Holmberg & Platzack 1995), as proposed by Postal (1974), but however, an Object Shift styled movement that raises the embedded subject not to the canonical object position of the matrix clause but to some other position external to the matrix VP. Discerning the details of this type of ECM-cum-Object Shift movement, and the exact landing site of the moved DP will be discussed below.



## 4.2 THE NATURE OF OBJECT SHIFT

In order to discern the final position of shifted objects, we must first determine the nature of Object Shift. To begin, "the landing site of Scandinavian Object Shift is a mixed position exhibiting some properties characteristic of A-movement and some characteristics of  $\bar{A}$ -movement" (Holmberg & Platzack 1995). Object Shift, therefore, appears to represent a third type of movement operation available within the current theory of transformational movement.

Consequently, Object Shift is not completely a type of  $\bar{A}$ -movement despite the belief that the shifted object is attached to VP which is considered an  $\bar{A}$  position. This is evidenced by three characteristics of Object Shift not shared with  $\bar{A}$ -movement. First, Object Shift cannot raise an argument out of a finite clause. Observe the contrast between (42a) where movement occurs out of a non-finite ECM subordinate clause, and the illicit (42c) containing a full CP finite lower clause. As is evident from (42b), a grammatical result is tenable when the lower clause subject *Haraldur* remains in situ. However, if this argument is raised across the complementizer *að*, the result is an ungrammatical construction regardless of the argument's case.

- (42) a. Þeir<sub>i</sub> telja Harald<sub>j</sub> allir<sub>i</sub> t<sub>j</sub> vera ánægðan<sub>j</sub>.

They<sub>NOM</sub> believe Harald<sub>ACC</sub> all<sub>NOM</sub> to.be happy<sub>ACC</sub>

- b. Þeir<sub>i</sub> telja allir<sub>i</sub> að Haraldur<sub>j</sub> sé ánægður<sub>j</sub>

They<sub>NOM</sub> believe all<sub>NOM</sub> that Harald<sub>NOM</sub> is happy<sub>NOM</sub>

- c. \*Þeir<sub>i</sub> telja Haraldur/Harald<sub>j</sub> allir<sub>i</sub> að t<sub>j</sub> sé ánægð-ur/-an<sub>j</sub>

They<sub>NOM</sub> believe Harald<sub>NOM/ACC</sub> all<sub>NOM</sub> to.be happy<sub>NOM/ACC</sub>

This clause type restriction is a token of A-movement whereas  $\bar{A}$  constituents are not constrained in this manner.

Second, unlike Wh-movement, Object Shift does not license a parasitic gap as exemplified by the Swedish sentences below.

- (43) a. Den artikeln<sub>i</sub> kastade dom t<sub>i</sub> innan jag hade läst t<sub>i</sub>.

That article threw they before I had read

*That article they threw away before I had read*

- b. \*Den artikeln<sub>i</sub> kastades t<sub>i</sub> innan jag hade läst t<sub>i</sub>.

That article was-thrown before I had read

(Holmberg & Platzack 1995)

Lastly, Object Shift is not affected by weak cross-over as is evident from the sentence in (44b) where the object *honom* has shifted across the co-referent PP *i hans* without problem. This is contrasted with (44a) where  $\bar{A}$ -movement of the Wh-word *vem* over its co-referent yields an unfavourable result.

- (44) a. ?Vem<sub>i</sub> tilldelade dom i hans<sub>i</sub> frånvaro t<sub>i</sub> priset

Who awarded they in his absence the-prize?

- b. Dom tilldelade honom<sub>i</sub> i hans<sub>i</sub> frånvaro t<sub>i</sub> priset

They awarded him in his absence the-prize?

(Holmberg & Platzack 1995)

Finally, it is interesting to note that Object Shift never topicalises or focuses its shifted argument. Unlike these types of  $\bar{A}$ -movements, Object Shift always sees its argument landing in a case-position (Vikner 1989).



Object Shift, however, is not completely analogous to A-movement as it happens. Evidence for this comes from the fact that shifted objects are unable to act as antecedents for bound anaphors (Holmberg & Platzack 1995). This is to be contrasted with arguments that have undergone passivization (an A-movement), since these arguments can bind anaphors from their surface positions. This disparity is compared below in (45).

- (45) a. Hann taldi þá/Ólaf og Marteini, þeim/\*sér/\*hvorum öðrum til undrunar, t<sub>i</sub>  
vera jafn góða.

He believed them<sub>ACC</sub>/Olafur and Martin<sub>ACC</sub>, them<sub>DAT</sub>/themselves<sub>DAT</sub>/each  
other<sub>DAT</sub> to wonder, to.be equally good

*To their surprise, he believed Olafur and Martin to be equally good.*

- b. Ólafur og Marteinni voru, \*þeim/sér/?hvorum öðrum til undrunar, taldir t<sub>i</sub>  
vera jafn góða.

Olafur and Martin<sub>NOM</sub> were, them<sub>DAT</sub>/themselves<sub>DAT</sub>/each other<sub>DAT</sub> to  
wonder, believed to.be equally good

*Olafur and Martin were, to their surprise, considered to be equally good.*

(Holmberg & Platzack 1995)

In example (45a), the ECM subject *Ólaf og Martein* has been shifted up to the matrix clause. From this final position it is incapable of properly binding either a reflexive or reciprocal anaphor (*sér* and *hvorum öðrum* respectively). Additionally, it makes no difference whether the shifted argument is a full DP or bare pronoun – neither forms a licit anaphor relation. Turning to the passive construction in (45b) we notice a result contrary to that just discussed. In this instance when the ECM subject has been raised to

the head of the entire phrase via passivization (a type of A-movement), it can act as the antecedent to the anaphor. From this dichotomy we can conclude that Object Shift is not strictly a type of A-movement.

Having discussed the mixed nature of Object Shift with regard to A/ $\bar{A}$ -movement, we can summarize that, like A-movement, Object Shift moves its argument to a Case-licensed position. Otherwise, Object Shift displays many characteristics similar to  $\bar{A}$ -movement which leads Holmberg and Platzack (1995) to conclude that the movement is best described as "Case-licensed  $\bar{A}$ -movement". This is to say that Object Shift never hosts an operator and must incorporate case phenomena to some extent, unlike other types of  $\bar{A}$ -movement such as Wh-movement and topicalisation.

At this juncture the analysis can now turn to examine the nature of the V-to-T verbal movement that is a prerequisite for licit Object Shift. This phenomenon, known as Holmberg's Generalisation, will be discussed in what follows.

#### 4.3 A PMC ANALYSIS OF HOLMBERG'S GENERALISATION

What characteristics of V-to-T movement make Object Shift possible and why is it required in order for licit Object Shift to take place? An interesting explanation for the interconnectedness of the seemingly unrelated movements comes from Richards' (2001) Principle of Minimal Compliance (PMC). This notion accounts for the unexpected grammaticality of sentences containing violations of a given constraint. For example, sentences containing movement or structural violations are typically considered to be ungrammatical; however, as Richards (2001) notes, this is not always the case. The PMC

states that in these sorts of constructions “a dependency which would be ill-formed in isolation is somehow ‘saved’ by the presence of a well-formed dependency” (Richards 2001). Therefore, the central claim of the PMC is that the presence of a licit construction can somehow trump the presence of an illicit construction within a given environment. This is demonstrated in the following Japanese sentences containing long distance scrambling.

- (46) a. \*Isoide<sub>i</sub> John-ga [Mary-ga t<sub>i</sub> sono heya-o soojishita to] itta

Quickly John-NOM Mary-NOM that room-ACC cleaned that said

*John said that Mary quickly cleaned the room.*

- b. Sono heya-o<sub>j</sub> John-ga [Mary-ga t<sub>j</sub> soojishita to] itta

That room-ACC John-NOM Mary-NOM cleaned that said

*That room, John said that Mary cleaned.*

- c. Isoide<sub>i</sub> sono heya-o<sub>j</sub> John-ga [Mary-ga t<sub>i</sub> t<sub>j</sub> soojishita to] itta

Quickly that room-ACC John-NOM Mary-NOM cleaned that said

*That room, quickly, John said that Mary cleaned.*

(Richards 2001)

In sentence (46a), long distance scrambling of the adverbial adjunct *isoide* results in ungrammaticality. Conversely, however, verbal arguments are free to undergo long distance scrambling in Japanese. This is demonstrated in sentence (46b) where the object *sono heyao* has been raised to the front of the sentence. Turning to sentence (46c) finally, we see that the adverb *isoide* has once again undergone long distance scrambling. However, in this instance a grammatical sentence results. Given the Principle of Minimal

Compliance, (46c) is possible because the verbal argument *sono heyao* has also undergone long distance scrambling in addition to the adverb's movement. Although movement of the adverb alone in sentence (46a) was prohibited, when this unacceptable movement is paired with the well-formed movement observed in (46b), a grammatical sentence results.

Building on this notion, we might suppose that the availability of Object Shift hinges on the PMC. As has been noted throughout this investigation, licit Object Shift must be preceded by verbal movement from V-to-T. This restriction on Object Shift resembles that outlined in the PMC and can be employed to account for the un/grammaticality of the following sentences in (47).

- (47) a. \*Jón hefur bækurnar<sub>j</sub> [<sub>VP</sub> ekki lesið t<sub>j</sub>]

John has books-the not read

- b. Jón las<sub>i</sub> [<sub>VP</sub> ekki t<sub>i</sub> bækurnar]

John read not books-the

- c. Jón las<sub>i</sub> bækurnar<sub>j</sub> [<sub>VP</sub> ekki t<sub>i</sub> t<sub>j</sub>]

John read books-the not

In sentence (47a) the verbal complement *bækurnar* is prohibited from undergoing Object Shift and raising to a VP-external position. The following (47b) example demonstrates how the verb located in the head of VP is permitted to raise when there is no auxiliary merged directly in T. The Principle of Minimal Compliance comes into effect when we examine sentence (47c). In this example it is evident that the ill-formed object movement of (47a) is now permitted when coupled with the initial verbal raising observed in (47b).



Just as we saw in the Japanese examples, the PMC can be applied to the notion of Object Shift whereby the licit movement of the verb from V-to-T trumps what would in isolation be an ill-formed object movement – allowing the derivation to converge.

#### 4.4 ADDITIONAL RESTRICTIONS ON OBJECT SHIFT

As an alternative to the PMC analysis of Object Shift discussed above, it is interesting to note that Object Shift is not only prohibited when the main verb remains in situ, but also when the object is in the complement position of a prepositional phrase (Holmberg 1986). This notion is exemplified in Swedish below:

(48) a. Jag tror inte [på det]

I believe not in it

b. \*Jag tror det<sub>i</sub> inte [på t<sub>i</sub>]

I believe it not in

*I don't believe it.*

(Holmberg 1986)

Thus, we might conclude that objects are incapable of shifting over any type of case assigning entity – whether verbal or prepositional. This notion seems to hold true as, “Object Shift does not apply across any phonological material in the predicate except predicate adjuncts such as the negation word and other adverbs” (Holmberg & Platzack 1995).

Additionally, by expanding the scope of Lasnik and Saito's (1999) discussion of raising predicates and Procrastinate, it is possible to apply the same reasoning which disallows movement of certain embedded DPs in raising constructions to the discussion



of Object Shift. The three sentences given in (49) below demonstrate that once a nominal unit has been assigned case there is no longer motivation for movement, even if this movement would prevent the need for expletive insertion. The embedded DP *a man* in the illicit sentences has been raised to the specifier of the raising verb *seem* in (49b) and to the matrix specifier position of the passive verb *believed* in (49c). However, the only grammatical sentence (49a) sees the DP remaining in situ relying on expletive *it* insertion to save the derivation. From this we can assume that *a man* "has no reasons of its own for moving, either overtly or covertly, since its case is licensed by *to*" (Lasnik & Saito 1999).

- (49) a. It<sub>i</sub> is believed [t<sub>i</sub>] to seem [to [a man]<sub>j</sub>] that it is raining  
 b. \*It<sub>i</sub> is believed [a man]<sub>j</sub> to seem [to t<sub>j</sub>] that it is raining  
 c. \*[a man]<sub>j</sub> is believed [t<sub>j</sub>] to seem [to t<sub>j</sub>] that it is raining.

(Adapted from Lasnik & Saito 1999)

Building on Lasnik and Saito's notion, we might assume that Object Shift (both out of a verbal and a prepositional complement position) is also restricted in the same manner.

First we will examine the more obvious example involving movement out of a prepositional phrase. In Icelandic, like Swedish, a pronoun cannot shift over a case-assigning preposition even if the main verb has undergone V-to-T movement.

- (50) a. Jón talaði<sub>i</sub> ekki t<sub>i</sub> [við hana<sub>j</sub>]  
 John spoke not with her  
 b. \*Jón talaði<sub>i</sub> hana<sub>j</sub> ekki t<sub>i</sub> [við t<sub>j</sub>]  
 John spoke her not with

The example in (50b) is illicit because, following Lasnik and Saito (1999), the pronoun *hana* has no motivation for movement since it has already had its case features licensed by the preposition *við*.

Similarly we can use this notion of case assignment to explain illicit Object Shift from the complement position of an *in situ* main verb. In this instance instead of a preposition it is the main verb that assigns case to the object in its complement position. This yields the same result in (51) as we observed in example (50) above.

(51) a. Jón hefur ekki [séð hana<sub>i</sub>]

John has not seen her

b. \*Jón hefur hana<sub>i</sub> ekki [séð t<sub>i</sub>]

John has her not seen

The illicit Icelandic example in (51b) patterns with (50b) where movement out of a case-licensing domain results in ungrammaticality.

Having discussed an alternative to the PMC account of illicit Object Shift, we must consider how a grammatical instance of Object Shift might take place under this analysis. Recall that in a licit example of Object Shift the verb undergoes V-to-T movement; additionally, the object must not be embedded within a prepositional phrase. When the verb raises, the object will necessarily be located in the complement position of an empty case assigning head. This is the crucial difference between a grammatical and ungrammatical instance of Object Shift since “a non-empty case licensing head licenses the case of its governee obligatorily, [while] an empty case licensing head does so

optionally" (Holmberg 1986). Thus, when the main verb raises from V-to-T leaving the head of the VP empty, case is not assigned to the object – meaning that it is free to shift.

#### 4.5 LIGHT VS. FULL DP OBJECT SHIFT

Having developed a model capable of accounting for the Icelandic Object Shift data, the discussion can now turn to explaining why there are discrepancies in the types of arguments that can shift within the different Scandinavian languages. For example, in the Mainland Scandinavian languages only weak (unstressed) pronouns undergo Object Shift, while Icelandic allows both pronouns and full DPs to shift. If the phenomenon is based on case assignment, the type of object should not matter.

Holmberg and Platzack (1995) suggest, however, that weak pronouns behave like clitics in that they cannot be stressed, modified, or surface in  $\bar{A}$ -positions (the latter discussed in detail above). Following from this, an explanation for the obligatory movement of weak pronouns in the Scandinavian languages is tenable. Similar to clitics, these pronouns lack lexical information and therefore do not project full DPs. Since the canonical object position within VP is necessarily a theta-marked position, weak pronouns are forced to move, since "a purely functional nominal category without lexical substructure cannot be assigned a theta-role" (Holmberg & Platzack 1995). Therefore, the difference between a weak and strong pronoun is the latter's ability to project a full DP – akin to having a null definite article in its underlying structure.

It should be noted that weak Scandinavian pronouns are not pronominal clitics comparable to those found in French and other Romance languages. This is because

Scandinavian weak pronouns do not undergo 'clitic climbing' when verbal movement from T-to-C occurs. This is described in (52) below.

(52) a. Quand l'a-t-il lu?

When it+has he read

*When did he read it?*

b. \*Sá hana; Jón t<sub>i</sub> ekki t<sub>i</sub>?

Saw her John not

Unlike the French clitic *l'*, the Icelandic weak pronoun *hana* does not move to C when in an interrogative construction.

Having discussed the nature of weak pronoun Object Shift in Scandinavian, it is possible to turn to an examination of full DP objects and their conflicting behaviour in the Scandinavian languages. In Mainland Scandinavian it is impossible to shift a full DP object, whereas in Icelandic Object Shift can apply to all types of object arguments. In the past this has typically been explained by the presence of overt case morphology in Icelandic versus the absence of overt nominal case in Mainland Scandinavian. This case-based Object Shift contrast is demonstrated in (53) where the overt case morphology found in Icelandic appears to be the only way of distinguishing the behaviour of one language from the other.



- (53) a. Þú sást hana<sub>i</sub> ekki t<sub>i</sub> (Icelandic 3sg.fem: hún<sub>NOM</sub>, hana<sub>ACC</sub>)  
           b. Du såg henne<sub>i</sub> inte t<sub>i</sub> (Swedish 3sg.fem: hon<sub>NOM</sub>, henne<sub>ACC</sub>)  
               You saw her<sub>ACC</sub> not  
           c. Þú sást Jóhönnu ekki t<sub>i</sub> (Icelandic: Jóhanna<sub>NOM</sub>, Jóhönnu<sub>ACC</sub>)  
           d. \*Du såg Johanna<sub>i</sub> inte t<sub>i</sub> (Swedish: Johanna<sub>NOM</sub>, Johanna<sub>ACC</sub>)  
               You saw Johanna<sub>ACC</sub> not

From these examples the presence or absence of case morphology on full DPs (53c-d) seems to play a major role in determining licit from illicit Object Shift. However, this must not be the whole story, as an analysis based completely on overt case morphology, though a convenient theory, does not accommodate the contrasting Faroese data in (54) below.

- (54) a. Tú sást hana ikki t<sub>i</sub> (Faroese)  
           You saw her<sub>ACC</sub> not  
           b. \*Tú sást Siggu/bátin<sub>i</sub> ikki t<sub>i</sub>  
               You saw Sigga/boat-the<sub>ACC</sub> not

Apparent from the ungrammaticality of sentence (54b), full DP objects in Faroese pattern with those found in Mainland Scandinavian despite bearing case comparable to Icelandic. Evidently, overt case marking cannot be used as a means of determining when full DP Object Shift is permitted.

If morphology does not aid our discussion of the differences of Object Shift in the Scandinavian languages then we must try to find another reason. There is evidence that Faroese case morphology is somehow 'weaker' than that found in Icelandic (Holmberg &



Platzack 1995). This is to say that in certain environments where Icelandic DPs retain their lexical case assignments, in Faroese structural case must be employed to save the derivation. For example, in (55) the verb *to help* assigns a Quirky dative case to its object in both languages.

(55) a. Þeir hjálpuðu honum (Icelandic)

b. Teir hjálpti honum (Faroese)

They<sub>NOM</sub> helped him<sub>QUIRKY-DAT</sub>

(Holmberg & Platzack 1995)

However, when the sentences are passivized only the Icelandic Quirky nominal is maintained, while in Faroese structural nominative case overrides the original Quirky dative case.

(56) a. Honum var hjálpað (Icelandic)

Him<sub>QUIRKY-DAT</sub> was helped

b. Hann/\*honum bleiv hjálpin (Faroese)

He<sub>NOM</sub>/\*him<sub>QUIRKY-DAT</sub> was helped

(Holmberg & Platzack 1995)

In ECM environments, the same pattern holds. An argument that is initially assigned Quirky case in Faroese is not 'strong' enough to retain that case when moved from its original position.

(57) a. Mér líkar mjólkin (Icelandic)

b. Mær dámar mjólkina (Faroese)

Me<sub>QUIRKY-DAT</sub> likes milk-the

c. Hann telur mér/\*mig líka mjólkina (Icelandic)

d. Hann haldi \*mær/meg dáma mjólkina (Faroese)

He believes me<sub>QUIRKY-DAT</sub>/me<sub>STRUCTURAL-ACC</sub> to.like milk-the

(Holmberg & Platzack 1995)

Thus, in (57d) the Faroese ECM subject loses its Quirky case in place of structural accusative.

Alternatively, Thráinsson (2007) takes an opposing position concerning 'weak' vs. 'strong' morphology. He suggests the argument that "case in Faroese is syntactically weaker in some sense than Icelandic case...seems a rather doubtful claim" (Thráinsson 2007). Further evidence for his claim comes from the dearth of examples of Object Shift in Old Icelandic and Middle Norwegian despite both languages' rich morphological case systems.

In an attempt to account for the Object Shift disparity, Thráinsson (2007) proposes that in addition to having a rich case system, Icelandic also has a rich syntactic system. This is to say that there are more potential object positions available in Icelandic than the other Scandinavian languages. Evidence for this comes from the word order variations found in Transitive Expletive Constructions (discussed in Section 5.1 below). Syntactically speaking, Thráinsson argues that Object Shift involves movement to a position located between VP and TP which he cites as AgrOP. Therefore he suggests that

the reason Object Shift does not behave in Mainland Scandinavian as it does in Icelandic is because the former group of languages lack the AgrOP projection. However, this is problematic since Object Shift of weak pronouns is possible in Mainland Scandinavian – meaning that this type of weak pronominal movement is somehow different than full DP Object Shift. If this were the case then all of the similarities between weak NP and full DP Object Shift would need to be explained away.

Additionally, Thráinsson (2007) discounts some of Holmberg and Platzack's (1995) data used to show Faroese as having some sort of 'weaker' case morphology. Although some Faroese lexically case-marked objects do in fact revert to a structural nominative case when passivized, there are a number of verbs that do preserve Quirky case marking under passivization in Faroese such as *bíða* (wait for), *dugna* (help), *takka* (thank), and *trúgva* (believe). Regarding this, Thráinsson mentions that Holmberg and Platzack (1995) have possibly misunderstood the range of usage possible with the verb *dáma* (see example (57) above). This verb "takes a nominative subject for most speakers of modern Faroese, although it can also occur with a dative subject. Hence it is likely that when this verb is embedded under an ECM predicate, a dative subject will be dispreferred by many speakers" (Thráinsson 2007). Therefore, the absence of lexical case on the ECM subject in example (57d) is probably due to the variation available in main clause constructions. When an undisputed Quirky predicate is embedded under an ECM verb in Faroese, however, we see that the lexical case is maintained just as in Icelandic.



(58) Hann heldur \*meg/mær standast við orðalagslæru

He believes me<sub>STRUCTURAL-ACC</sub>/me<sub>QUIRKY-DAT</sub> to.be.nauseated by syntax

(Thráinsson 2007)

Following from these amendments to the facts, the puzzle presented by the interplay of Object Shift and case morphology has only become more confounded. I therefore suggest that it is not the presence of overt case morphology that licenses Object Shift. There may simply be a parametric variation at work which might motivate the differences observed across the Scandinavian languages.

#### 4.6 AN OBJECT SHIFT ANALYSIS OF ICELANDIC ECM CONSTRUCTIONS

Based on the facts presented in this chapter thus far, I propose, following Holmberg (1984, 1986) and extending Postal's (1974) analysis of ECM complementation as a type of subject to object raising, that the movement observed in these types of constructions is in fact a form of Object Shift. This section aims to elaborate on this notion by employing the analysis of Object Shift outlined above.

"Object Shift is possible from the subject position of an Accusative Infinitive (ECM) construction, provided this position is governed by the matrix verb" (Holmberg 1984). Chomsky (1981) analyzes ECM constructions as taking a reduced clause (bare S) complement. In the modern instantiation of his theory, this is equated to saying that the complements of believe-type ECM verbs lack CP projections. Following from this, the criterion put forth by Holmberg (1984) that the matrix verb "govern" the ECM complement position is still met in the modern theory. This is to say that because there is



no CP boundary between the matrix ECM verb and the lower complement clause, there is necessarily no CP phase boundary that would normally block movement. This is contrasted with a non-ECM verb whose complement obligatorily projects a full CP. In this instance, demonstrated below in (59a), there is a phase boundary between the matrix verb and lower subject. This results in an illicit environment for Object Shift making raising ungrammatical. When there is no CP boundary between the matrix and embedded clause, the special type of Object Shift is possible as seen in example (59b).

(59) a. \*Þú heldur ég/mig<sub>i</sub> sennilega<sub>CP</sub>[(að) t<sub>i</sub> sé galinn]

you think I<sub>NOM</sub>/me<sub>ACC</sub> probably (that) am crazy

b. Jón<sub>i</sub> telur mig<sub>j</sub> í barnaskap sínum<sub>i</sub> TP[t<sub>j</sub> vera galinn]

John believes me in foolishness his to.be crazy.

(Adapted from Holmberg 1984)

Having established this restriction on clause structure, we can now proceed to directly relate standard (mono-clausal) Object Shift to ECM (bi-clausal) Object Shift. As discussed above, the Mainland Scandinavian languages permit only unstressed pronouns to undergo Object Shift. When the object is stressed or a full DP, however, Object Shift is prohibited. This dichotomy maintains even when Object Shift is considered within an ECM context, as evident from the licit and illicit Swedish sentences contrasted below in (60).

(60) a. Eva<sub>i</sub> ansåg honom<sub>j</sub> i sin<sub>i</sub> dumhet [t<sub>j</sub> kunna förstöra datorn]

Eva believed him in her stupidity to.be.able to.ruin the.computer

b. \*Eva<sub>i</sub> ansåg Jonas<sub>j</sub> i sin<sub>i</sub> dumhet [t<sub>j</sub> kunna förstöra datorn]

Eva believed Jonas in her stupidity to.be.able to.ruin the.computer

(Holmberg 1984)

In Mainland Scandinavian, raising the embedded ECM subject to a position within the matrix clause is constrained in the same way as Object Shift in main clauses.

Turning to Icelandic, we will recall that the conditions on Object Shift are less stringent than Mainland Scandinavian – Object Shift may apply to both unstressed pronouns and full DPs in the language. Thus, we would expect to see this property reflected in the derivation of ECM movement if a relation is to be made. Indeed, as evidenced by the examples in (61), it is possible to raise both the pronoun *hana* in (61a) and the full DP *Harald* in (61b).

(61) a. Þeir<sub>i</sub> töldu hana<sub>j</sub> allir<sub>i</sub> [t<sub>j</sub> vera galna]

They<sub>NOM/PL/M</sub> believed her<sub>ECM-ACC</sub> all<sub>NOM/PL/M</sub> to be crazy<sub>ACC</sub>

*They all believed her to be crazy*

b. Þeir<sub>i</sub> töldu Harald<sub>j</sub> allir<sub>i</sub> [t<sub>j</sub> vera galinn]

They<sub>NOM/PL/M</sub> believed Harald<sub>ECM-ACC</sub> all<sub>NOM/PL/M</sub> to.be crazy<sub>ACC</sub>

*They all believed Harald to be crazy*

A vital prerequisite for Object Shift in all of the Scandinavian languages is verbal movement from V-to-T. Thus, when an auxiliary verb is employed, movement of this

type is prohibited. Similarly, when an auxiliary verb is employed in the main clause of an ECM construction, raising of the embedded subject yields ungrammaticality.

- (62) a. \*Eva<sub>i</sub> lär anse honom<sub>j</sub> i sin<sub>i</sub> dumhet [t<sub>j</sub> kunna förstöra datorn] (Swedish)

Eva is.supposed to.believe him in her stupidity to.be.able to.ruin  
the.computer

- b. \*Jón<sub>i</sub> hefur talið mig<sub>j</sub> í barnaskap sínum<sub>i</sub> [t<sub>j</sub> hafa étið hákarlinn] (Icelandic)

John has believed me in foolishness his to.have eaten shark-the.

(Holmberg 1984)

In example (62a) the Swedish pronoun *honom* is prohibited from shifting to the matrix clause due to the presence of the auxiliary *lär*. Similarly, the Icelandic sentence in (62b) is ungrammatical due to the insertion of the auxiliary *hefur* which necessarily blocks V-to-T movement of the main verb *talið*. These facts give further evidence to the corresponding nature of ECM movement and Object Shift.

There remains one problem with the current analysis of ECM raising as a type of Object Shift procedure. This problem has to do with the non-obligatory raising of certain embedded ECM subjects whose mono-clausal Object Shifting counterparts would have to raise obligatorily. In Icelandic, mono-clausal styled Object Shift requires all unstressed pronouns to undergo leftward movement. This notion, established above, does not seem to hold in ECM constructions, as evidenced from the grammatical nature of the sentence in example (63) below.

(63) Jón telur í barnaskap sínum mig hafa étið hákarlinn

John believes in foolishness his me to.have eaten shark-the.

(Holmberg 1984)

In this instance, the object *mig* is permitted to remain in situ in the lower embedded clause. Under an Object Shift interpretation of ECM complement movement, this construction should be deemed ungrammatical as evidenced from the illicit nature of (64a) below.

(64) a. \*Jón þekkir ekki mig

John knows not me

b. Jón þekkir mig<sub>i</sub> ekki t<sub>i</sub>

John knows me not

In (64a) the pronoun *mig* is not permitted to remain in situ in contrast with the in situ pronoun in (63) above. In order to account for this seeming discrepancy in the analysis, we must turn to Holmberg (1984) who comments on the “tendency for ‘heavy’ constituents to appear in, or near, sentence-final position.” Therefore, when ‘weight’ is added to a pronoun in the following standard Object Shift example, it is permitted to remain in situ despite being, fundamentally, a bare weak pronoun.

(65) Jón þekkir ekki hana þarna sem er með bláa hattinn

John knows not her there who is wearing the blue hat

(Holmberg 1984)

The relative clause *þarna sem er með bláa hattinn* when added to the pronoun makes the construction in (65) possible.



Likewise, we will assume that "the predicate of the Accusative Infinitive (ECM) clause adds weight to the subject pronoun in a similar manner" (Holmberg 1984). Thus in sentence (63), repeated below as (66), the lack of pronominal movement is accounted for by the fact that the entire lower TP acts as a type of relative clause (similar to that found in example (65) above). This additional phrasal weight is once again capable of blocking pronoun shifting.

(66) Jón telur í barnaskap sínum mig hafa étið hákarlín

John believes in foolishness his me to.have eaten shark-the

(Holmberg 1984)

The similarities observed between main clause Object Shift and ECM shifting are such that the latter is best described as being a subtype of the former. This is to say that "the observed properties of the raising process involved...are explained by the hypothesis that the raising is a special case of Object Shift" (Holmberg 1984). Following from this hypothesis, we can now turn our attention to the novel syntactic analysis of Quirky and non-Quirky Icelandic ECM data with the aim of structurally accounting for the nature of ECM movement via an Object Shift analysis.

## CHAPTER 5

# THE SYNTAX OF OBJECT SHIFT

Having discussed the basic properties of Object Shift, we can now turn to examine the underlying syntactic structure of this operation. In order to highlight the significance of Object Shift within the scope of the ECM debate, we turn to double object and Transitive Expletive Contractions (TECs) to motivate multiple specifier positions. This will allow both main clause and ECM Object Shift to be accounted for syntactically.

Following the VP-shell analysis of Larson (1988), discussed above, we accept that just as a subject asymmetrically c-commands an object, so too does an indirect object asymmetrically c-command a direct object in a double object construction. For Icelandic, this relation is borne out in example (67) from Collins & Thráinsson (1996):

(67) a. Ég hafði gefið konunginum<sub>i</sub> ambáttina sínum<sub>i</sub>

I had given the king the maidservant his

*I had given the maidservant to her king.*

b. \*Ég hafði gefið konungi sína<sub>i</sub> ambáttina<sub>i</sub>

I had given the king her the maidservant (Collins & Thráinsson 1996)

Because the reflexive in (67a) follows its antecedent, *konunginum*, a licit sentence results. However, when the reflexive is placed before its c-commanding antecedent, as is the case in (67b), the derivation of the sentence crashes. From this we can gather that the indirect

object must indeed c-command the direct object. This relationship has repercussions insofar as Object Shift is concerned: first, the indirect object may shift on its own whereas the direct object may not; and second, both the indirect and direct object can shift, but only if they do so together. Before taking up a discussion of these two scenarios, it is important to recall that in order for Object Shift to take place in any situation there must first be verbal movement from V-to-T.

In Icelandic ditransitive (triadic) constructions consisting of a single lexical verb, it is possible for the indirect object to undergo Object Shift. This is exemplified below in (68) using the negator *ekki* to highlight the movement.

(68) a. *Ég gaf ekki Jóni bækurnar*

I gave not John books-the

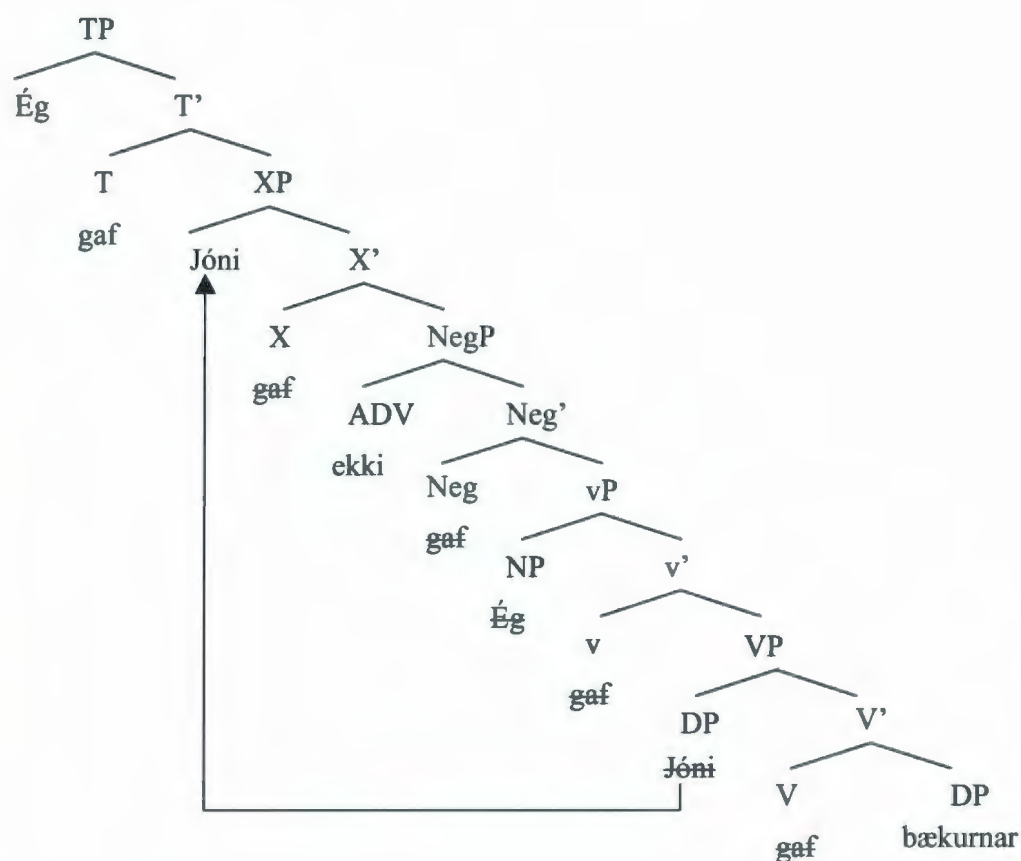
b. *Ég gaf Jóni<sub>i</sub> ekki t<sub>i</sub> bækurnar*

I gave John not books-the

*I did not give John the books*

Example (68a) gives a standard ditransitive negative sentence with no Object Shift, which is contrasted with the sentence in (68b) where *Jóni* has shifted to a position to the left of the negator *ekki*. The Object Shift sentence in (68b) is represented with the tree diagram in (69) below. In addition to the VP-shell theory (Larson 1988), I assume that negation is facilitated by a NegP (negation phrase) projection as argued for by Pollock (1989). Evidence for this projection comes from Late-Middle English and languages like French that use dual negators, of which one is a clitic (Radford 2004). Thus, we know that *ekki* must be positioned within SpecNeg.

(69)



Ég gaf Jóni ekki bækurnar

I gave Jon<sub>DAT</sub> not books-the<sub>ACC</sub>

*I didn't give John the books*

The optional Object Shift operation is indicated with an arrow demonstrating that the indirect object *Jóni* moves from specVP to an external position located to the left of the verb phrase. We can see from an examination of the rest of the tree that the desired word order is tenable from this structuring of functional and lexical heads. This is to say that



the non-shifted and shifted sentences of example (68) are generated in this model by either employing Object Shift or not.

Turning to an illicit environment for Object Shift, namely one where there is no V-T verbal movement, we can attempt to pinpoint those differences that make Object Shift possible in (69) and not possible in constructions like (70) below.

(70) a. *Ég hef ekki gefið Jóni bækurnar*

I have not given John books-the

b. \**Ég hef Jóni ekki gefið bækurnar*

I have John not given books-the

*I have not given John the books*

The two sentences in (70) use the auxiliary verb *hef* in the T position meaning that the main verb *gefið* must remain in situ within VP. Because of the lack of verbal movement from V-to-T, the same Object Shift that was licit in (69) is no longer grammatical in (70b). Having discussed the limitations on Object Shift in sentences like (70b) throughout Chapter 4, we can now identify the structural restrictions that make Object Shift impossible in these environments. For this, we will now turn to a brief discussion of Bobaljik and Jonas (1996) that details an interesting examination of Transitive Expletive Constructions (TEC) in Icelandic.

## 5.1 ICELANDIC TRANSITIVE EXPLETIVE CONSTRUCTIONS

Icelandic falls into the category of Germanic languages that allows expletive subjects not only with intransitive but also with transitive predicates. For example, compare the English sentences in (71a-b) with the Icelandic in (71c-d)

(71) a. There have arisen several problems (intransitive expletive)

b. \*There ate many boys the sausages (transitive expletive)

c. Það hafa komið nokkrir gestir (intransitive expletive)

*There have arrived several guests*

d. Það borðuðu margir strákar bjúgun (transitive expletive)

*There ate many boys the sausages* (Bobaljik & Jonas 1996)

We can observe in these examples that English (like Norwegian, Danish, Swedish, Afrikaans, and some dialects of Faroese) does not allow Transitive Expletive Constructions (TECs). However Icelandic, which patterns with German, Dutch, Yiddish, Frisian, and some dialects of Faroese, permits expletive use with both intransitive and transitive constructions.

Since an expletive subject appears to the left of the verb in a TEC, it may appear as if the verbal arguments remain in situ within the VP. There is evidence, however, from sentences containing TECs along with Object Shift that directly refutes this notion. In these instances, it is impossible for the shifted object to surface to the left of the semantic subject. This means that even though the expletive subject is in the leftmost position, the semantic subject must still raise out of the VP in order to maintain its position to the left of the shifted object. This notion is exemplified below in (72).

(72) a. Það lauk einhver<sub>i</sub> verkefninu<sub>j</sub> [<sub>VP</sub> alveg t<sub>i</sub> t<sub>j</sub>]

there finished someone assignment-the completely

b. \*Það lauk verkefninu<sub>i</sub> [<sub>VP</sub> alveg einhver t<sub>i</sub>]

there finished assignment-the completely someone

*Someone completely finished the assignment*

(Jonas 1992)

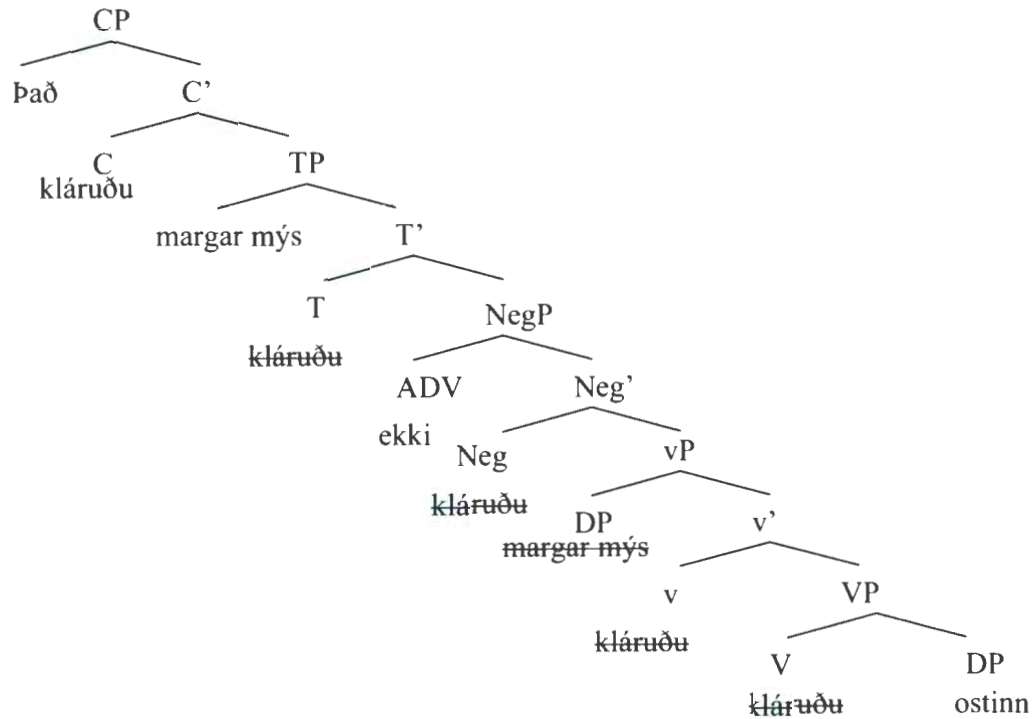
Following from the sentences in (72), it is impossible for a shifted object to surface in a position to the left of the semantic subject, despite the presence of an expletive subject to the left of the verb. This leads Bobaljik and Jonas to remark, “the fact that the subject of a TEC obligatorily precedes a shifted (i.e., VP-external) object suffices to prove that these subjects are external to the VP” (Bobaljik & Jonas 1996). Therefore, assuming that the expletive is merged directly into CP, the subject must raise to SpecTP in these situations.

It is not the case that only some subjects of TECs surface in SpecTP, they must always be located in SpecTP whether Object Shift has occurred or not. The evidence for this comes from adverb placement. If some TEC subjects surfaced in SpecVP and others in SpecTP then we would expect adverbs to act differently depending on which position the subject occupies. However, “with or without overt Object Shift, the subjects of TECs occur in the same structural position...SpecTP” (Bobaljik & Jonas 1996).

Therefore, we must now devise a structure that will accommodate the combination of a TEC with Object Shift. In doing so we will be shedding new light on our original problem, namely, describing the movements of subject and object DPs in Object Shift constructions without implicating CP. Let us first look at the tree structure

of an Icelandic TEC where no Object Shift has taken place. Following Thráinsson (2007), I assume the semantically null expletive *það* is merged directly in SpecCP<sup>6</sup>.

(73) A TEC With No Object Shift



Það kláruðu margar mýs; ekki *t<sub>i</sub>* ostinn (Bobaljik & Jonas 1996)

There finished many mice<sub>NOM</sub> not cheese-the<sub>ACC</sub>

The tree in (73) is derived as expected with verbal movement originating within the head of VP up to the complementizer phrase. Additionally, the subject undergoes A-movement from SpecvP to SpecTP, however, an expletive pronoun *það* is inserted in SpecCP to satisfy its [EPP] feature. Thus, the agentive subject *margar mýs* cannot raise

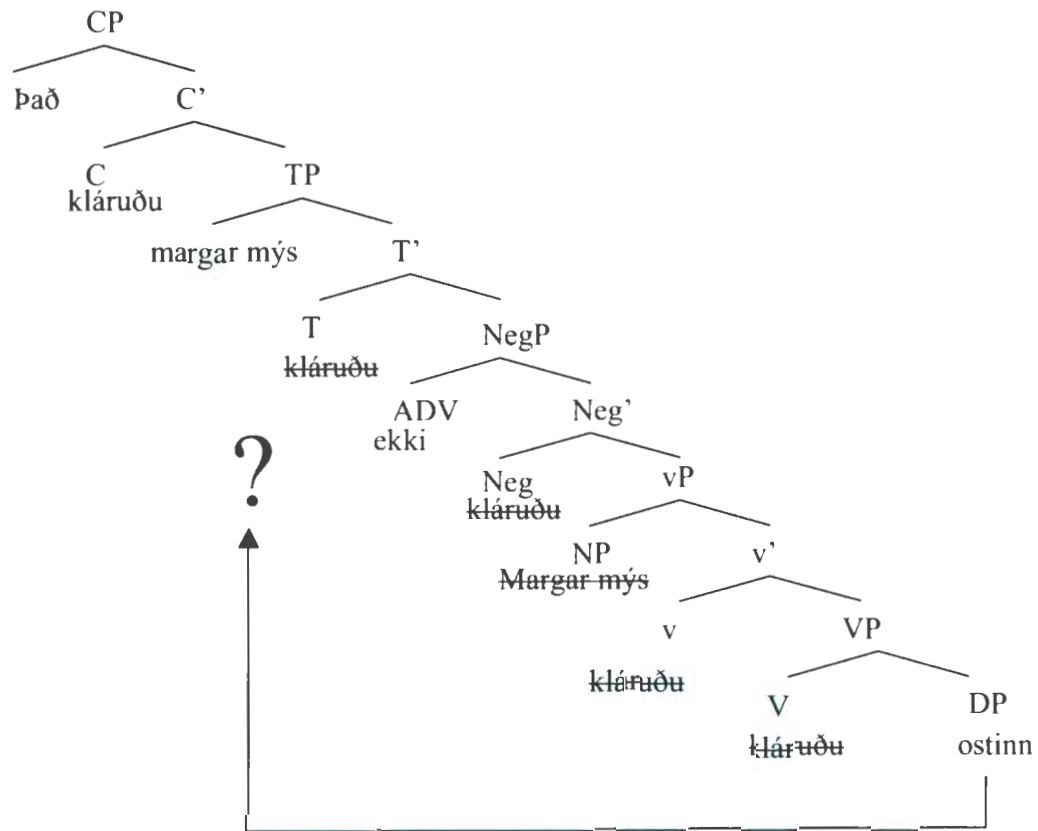
<sup>6</sup> However, as will become apparent, the theory will be capable of accounting for an additional SpecTP position wherein the expletive could also potentially be merged.



higher than SpecTP and, conversely, cannot remain in situ within the vP – a fact proven in example (72) above.

Turning now to an example of a TEC where Object Shift has taken place, we are met with a problem. It appears as if there is no position available for the shifted object to occupy. Having proven that the subject *margar mýs* must raise at least as high as the canonical subject position, SpecTP, in order for both the correct word order to obtain as well as satisfy all necessary checking requirements (both [EPP] and  $\phi$ -features), there is no longer an available position for a shifted object, as demonstrated in tree (74) below.

## (74) The Structural Problem with Object Shift



Það kláruðu margar mýs<sub>i</sub>; ostinn<sub>j</sub>; ekki t<sub>i</sub> t<sub>j</sub>

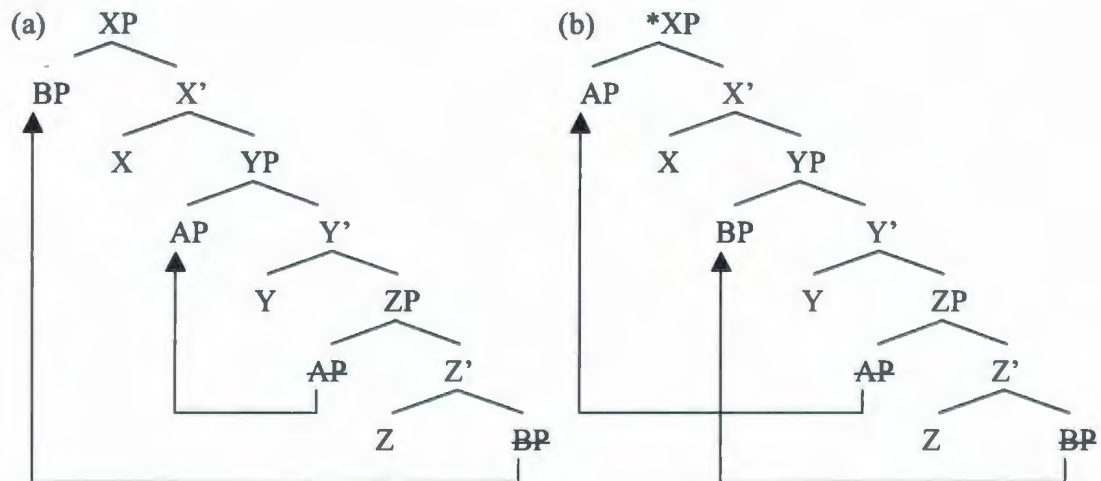
There finished many mice<sub>NOM</sub> cheese-the<sub>ACC</sub> not

In order to resolve this lack of available A-positions, the discussion will now turn to a theory of multiple specifiers.

## 5.2 MULTIPLE SPECIFIER POSITIONS

A notion discussed by Richards (2001) and Ura (2000) is one where functional heads are capable of projecting multiple specifier positions. Richards (2001) gives evidence for multiple specifiers based on the notions of Cyclicity and Shortest Move (Chomsky 1995)<sup>7</sup>. Observe how these notions interact in the derivation of the following structures.

## (75) Specifiers of Multiple Heads (Richards 2001)



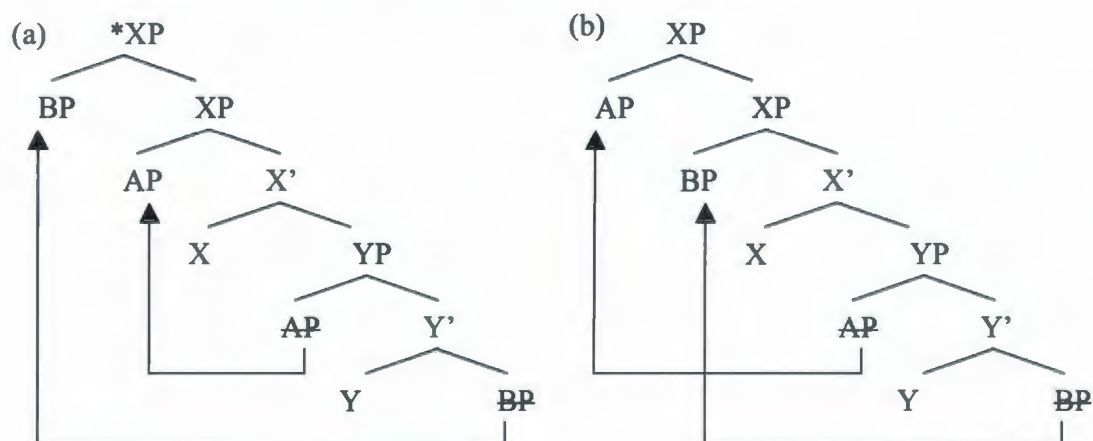
The type of movement described in (75a) necessarily obeys Cyclicity since AP moves to the first A-position that is introduced into the derivation. The lower argument, BP, raises to the next available A-position as it is introduced. Additionally, Shortest Move is not violated since each argument moves to the closest available Spec position that is introduced as the structure is built in a bottom-up fashion. Richards (2001) terms

<sup>7</sup> For an alternative perspective see Branigan (2010) whose Provocative Syntax model posits multiple specifier positions coming about as a result of *provocative* movement via an *agitator* as opposed to an EPP driven model where the positions must exist prior to any movement.

this type of movement as “nesting movement”. Conversely, the “cross-over” styled movements described in (75b) violate the principle of Cyclicity since the higher argument has not raised to the first available position projected. This movement also violates the Shortest Move constraint since SpecYP is closer to AP than SpecXP.

Having observed how to derive movement to multiple specifier positions in separate projections, we can turn our attention to an analysis involving multiple specifier positions within a single projection. We will see that the results attained in (75) differ from those in (76) below.

(76) Multiple Specifiers of a Single Head (Richards 2001)



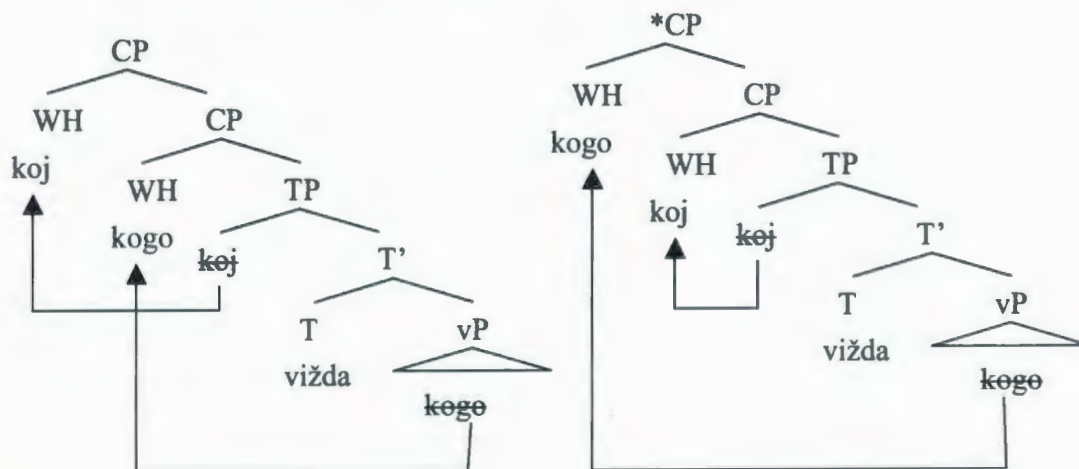
Observe that in tree (76a) where nesting-styled movement takes place, an illicit construction results. There is seemingly no problem with Cyclicity in this example since the higher argument, AP, raises to the closest available landing site (the lower SpecXP position), and BP necessarily moves to the next available position (the higher SpecXP position). Therefore, the problem must stem from the Shortest Move Constraint. Since Cyclicity in this situation does not discriminate between movement to specifier positions



within the same projection, Shortest Move says that BP ought to raise to a position below AP. Thus, we arrive at the construction in (76b) where the lower BP argument ‘tucks in’ below AP resulting in a crossover styled movement. Indeed this type of crossover is preferable when movement to multiple specifiers of a single head takes place. Summarizing the findings thus far, we can posit that “nested paths are a result of multiple attraction by multiple attractors, while crossing paths are a result of multiple attraction by a single attractor” (Richards 2001). Following from this assumption we expect to find that when raising paths obligatorily cross a single attractor is the cause.

Languages that allow multiple Wh-movement, show the characteristics of movement to multiple  $\bar{A}$  positions located in the same projection. This is evident from restrictions on the order of overtly raised Wh-words in Bulgarian. Analogous to the movement described in (76b) above, Wh-movement in Bulgarian, involving multiple specifier positions of a single projection, must necessarily use a cross-over styled movement as opposed to nesting movement. The prediction holds true as evidenced by the Bulgarian data in (77) below.

## (77) Bulgarian Multiple Wh-movement



a. Koj kogo vižda

who whom sees

*Who sees whom?*

b. \*Kogo koj vižda

whom who sees

*\*Whom sees who?*

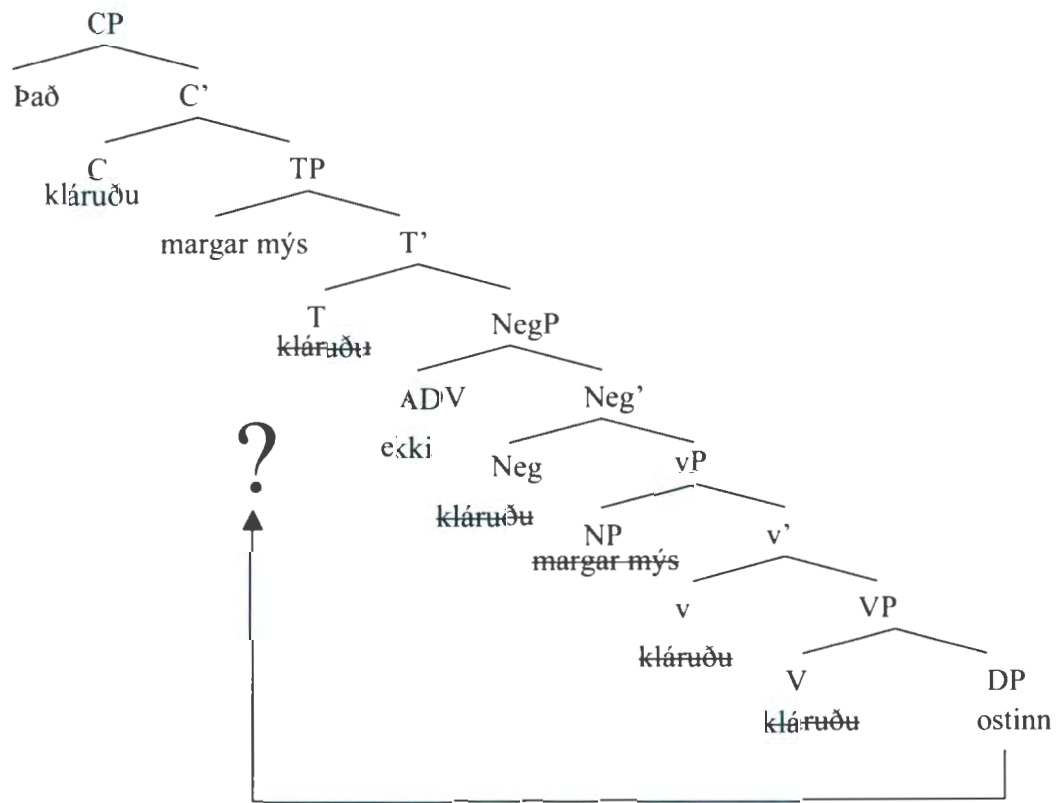
(Richards 2001)

If this type of multiple Wh-movement involved movement to specifier positions located in multiple heads, we would expect to observe sentences with the word order found in (77b) where obligatory nested movement occurs. However, because sentences of this type are not attested in the language we have proof for both the existence of multiple specifier positions within a single head and the existence of the type of crossover movement described by Richards (2001). Expanding on this theory, we can apply it to the structural problem posed by Object Shift.

## 5.3 OBJECT SHIFT AS MOVEMENT TO MULTIPLE SPECIFIER POSITIONS

Returning to the problem posed by Object Shift in Transitive Expletive Constructions repeated from (74) above as (78) below, we can apply the newly devised theory of specifier movement paired with the linguistic evidence from Bulgarian  $\bar{A}$ -movement to shed new light on the problem.

## (78) The Structural Problem with Object Shift

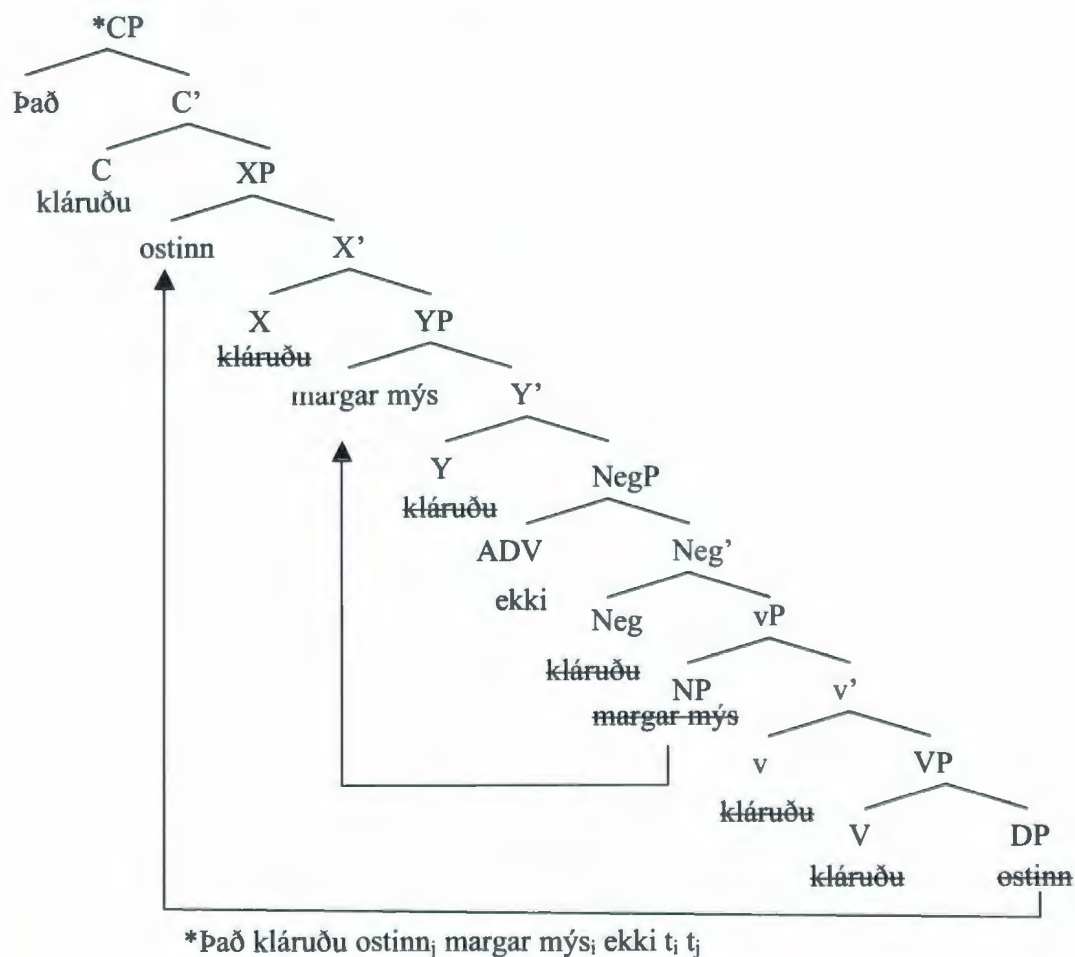


Það kláruðu margar mýs<sub>i</sub> ostinn<sub>j</sub> ekki t<sub>i</sub> t<sub>j</sub>

There finished many mice<sub>NOM</sub> cheese-the<sub>ACC</sub> not

By applying the technique used to account for Bulgarian multiple Wh-movement, we can now posit an analysis for the type of movement observed in Object Shift constructions. Previously, we attempted to find a position for the shifted object to occupy, however this would mean that movement of subject and shifted object would be to specifier positions of different projections. This would necessarily result in the nesting styled movement outlined in (79) below.

(79) Illicit Object Shift With Nesting Styled Movement

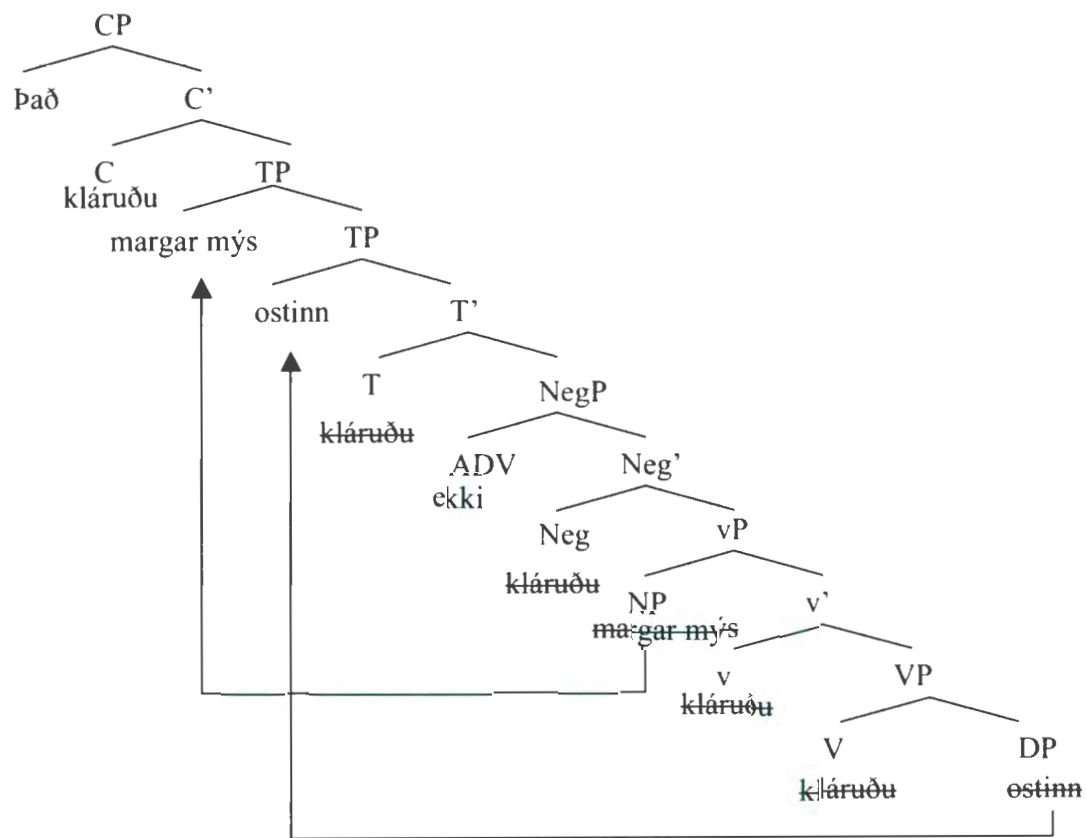


There finished cheese-the<sub>ACC</sub> many mice<sub>NOM</sub> not



Therefore, due to the ungrammaticality of the above construction, we will assume that movement of subject and shifted object is to two specifier positions of the same projection. This construction, which mimics that argued for Bulgarian multiple Wh-movement<sup>8</sup>, is detailed in (80) below.

(80) Grammatical Object Shift with Crossover Styled Movement



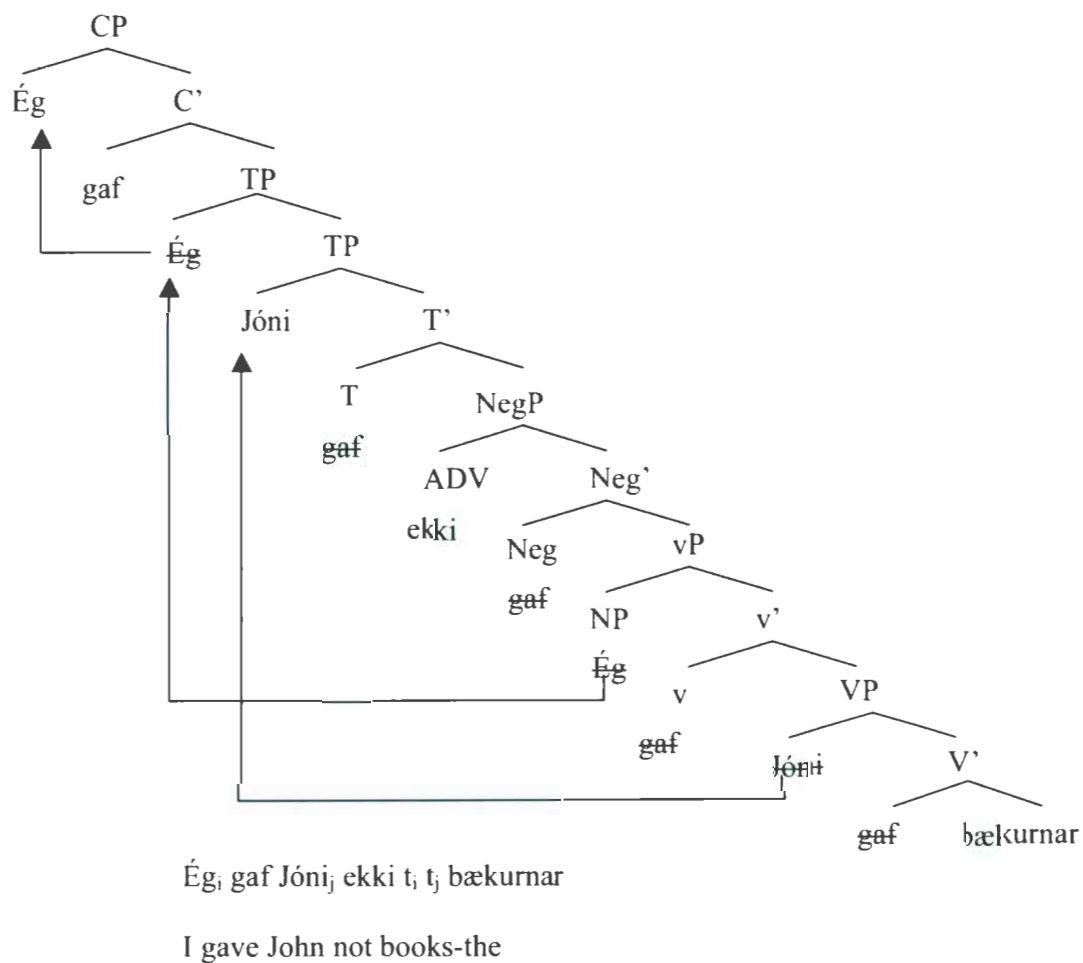
Það kláruðu margar mýs<sub>i</sub> ostinn<sub>j</sub> ekki t<sub>i</sub> t<sub>j</sub>

There finished many mice<sub>NOM</sub> cheese-the<sub>ACC</sub> not

<sup>8</sup> It is interesting to note this similarity between Bulgarian  $\bar{A}$ -movement and Object Shift, as it bolsters Holmberg and Platzack's (1995) analysis of Object Shift as a type of "Case-Licensed  $\bar{A}$ -movement" discussed in Chapter 4.

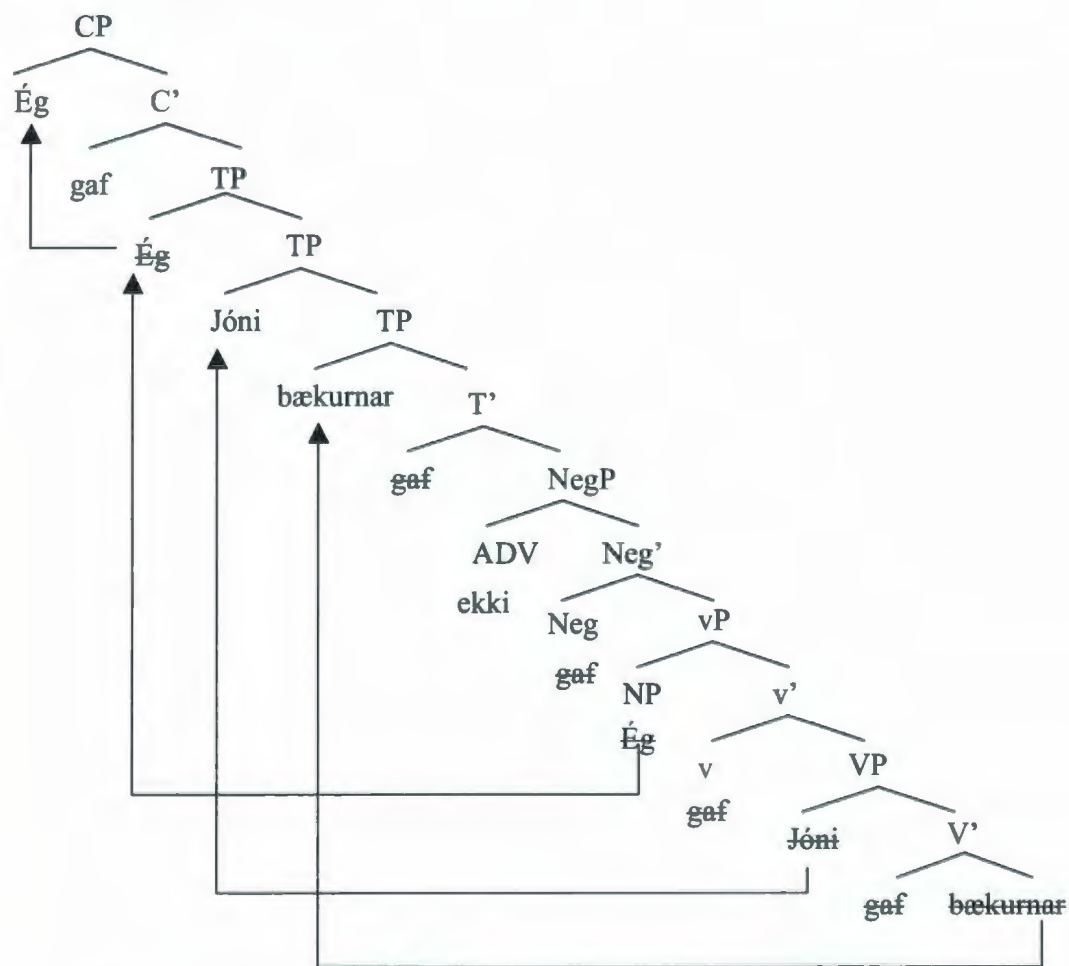
Having established this notion, we can now apply it to the structural problem posed by Object Shift. Just as the object in a Transitive Expletive Construction was raised to occupy a secondary TP specifier position, so too is the object in a basic Object Shift construction. This is demonstrated in (81) below.

(81) Basic Object Shift



Using this type of movement configuration, the object *Jóni* shifts over the base position of the subject and negation to a position above VP. Expanding on this notion, it is possible to account for the surface word order of double Object Shift constructions by simply adding a third specifier position in TP. This is exemplified in (82) below.

(82) Double Object Shift



Ég<sub>i</sub> gaf Jóni<sub>j</sub> bækurnar<sub>k</sub> ekki t<sub>i</sub> t<sub>j</sub> t<sub>k</sub>

I gave John books-the not

By employing the type of crossover styled movement motivated by a single functional projection, it is possible to attain the correct word order observed for Icelandic double Object Shift constructions.

In this section a means of accounting for the structural problems associated with Object Shift have been discussed. Expanding Richards (2001) concept of Bulgarian Wh-crossover movement to multiple specifiers of a single projection, it has been possible to describe the types of Object Shift movements attested in Icelandic. In what follows, we will see how the notions of Object Shift discussed throughout this section can be applied to the analysis of ECM movement. This will aid in further exposing the nature of ECM movement in Icelandic and universally.



## CHAPTER 6

# QUIRKY ECM COMPLEMENTATION

Icelandic Quirky oblique subjects can be used to shed light on the illusive nature of ECM complementation both in Icelandic and also cross-linguistically. The contentious ECM subject position (discussed in detail above) is scrutinized in what follows with the intention of elucidating the nature of ECM complementation by contrasting the syntactic repercussions of embedding non-Quirky and Quirky predicates. By doing so, the need for a novel constraint that restricts the movement of arguments to secondary specifier positions will come to light.

Beginning with the two example sentences in (83) below, we will first note the use of a non-Quirky predicate *vera* in the lower clause of (83a) versus the Quirky predicate *líða* in (83b). In (83a), the ECM subject *hana* surfaces with the expected ‘exceptional’ accusative case marking which is typical of ECM constructions. This is contrasted with the sentence in (83b) where the Quirky verb’s non-canonical case requirements (in this instance dative) overrides the exceptional accusative case marking observed in (83a). This phenomenon, discussed in Section 3.4, is described in detail by Thráinsson (2007).

(83) a. þeir töldu hana vera góða

They believed her<sub>ECM-ACC</sub> to.be good<sub>ACC</sub>

*They believed her to be good*

b. þeir töldu henni líða vel

They believed her<sub>QUIRKY-DAT</sub> to.feel<sub>QUIRKY</sub> well

*They believed her to feel well*

What is important to note with these two types of ECM constructions are the identical surface word orders. Despite the difference in case assignment and verb type, the ECM subjects appear to surface in the same position. Thus, nothing new about the ECM subject position can be learned from the two sentences as they currently stand.

I argue, however, that the two ECM subjects, *hana* (83a) and *henni* (83b) above, occupy different positions between the lower TP and higher matrix clause. It will be demonstrated that the non-Quirky ECM subject, *hana*, is able to raise to a secondary SpecTP within the matrix clause, while the Quirky ECM subject, *henni*, will only raise as high as the lower clause's SpecTP position. The difference between these two types of ECM subjects can begin to be isolated by using Icelandic quantifier stranding. As previously discussed, subject quantifiers can be stranded and thus used to mark the rightmost boundary of the clauses to which they belong. Therefore, we can determine whether lower subject movement has taken place based on the argument's position relative to a quantifier which has been left in situ. Compare the two sentences in (84) below:

- (84) a. Þeir<sub>i</sub> töldu allir<sub>i</sub> hana vera góða

They<sub>MASC/PL/NOM</sub> believed all<sub>MASC/PL/NOM</sub> her<sub>ACC</sub> to.be good<sub>ACC</sub>

- b. Þeir<sub>i</sub> töldu hana allir<sub>i</sub> vera góða

They<sub>MASC/PL/NOM</sub> believed her<sub>ACC</sub> all<sub>MASC/PL/NOM</sub> to.be good<sub>ACC</sub>

*They all believed her to be good*

The quantifier *allir* in sentences (84a-b) has remained in situ within the vP of the matrix clause marking the subject's initial syntactic position. Since the ECM subject *hana*, in (84b), can occupy a position to the left of the quantifier we know that it must be located in a position at least as high as the matrix vP level. Let us now turn to compare this state of affairs with an ECM + Quirky predicate construction.

The sentence in (85a) is analogous to (84a) except that a Quirky predicate has been employed in the embedded clause – requiring a Quirky ECM subject. Essentially, the two sentences display the same surface word orders. Turning to (85b), we notice that, unlike its counterpart in (84b), it is not as natural and arguably ungrammatical to raise a Quirky ECM subject to the left of the stranded quantifier.

- (85) a. Þeir<sub>i</sub> töldu allir<sub>i</sub> henni líða vel

They<sub>MASC/PL/NOM</sub> believed all<sub>MASC/PL/NOM</sub> her<sub>DAT</sub> to-feel<sub>QUIRKY</sub> well

- b. ??Þeir<sub>i</sub> töldu henni allir<sub>i</sub> líða vel

They<sub>MASC/PL/NOM</sub> believed her<sub>DAT</sub> all<sub>MASC/PL/NOM</sub> to-feel<sub>QUIRKY</sub> well

*They all believed her to feel well*

The contrast between (84b) and (85b) suggests that there is something about the nature of Quirky ECM subjects that prohibits such leftward movement into the higher matrix clause.

I propose that movement of a non-Quirky ECM subject is motivated by the need for structural case assignment, while the lack of movement observed with Quirky ECM subjects results from the inherent case marking received from the Quirky predicate. This dichotomy is straightforwardly observed when comparing the ECM subject height differences of examples (84b) and (85b) below.

- (86) a. Þeir<sub>i</sub> töldu hana ~~Þeir~~<sub>i</sub> allir<sub>i</sub> [~~hana~~ vera góða]

They<sub>MASC/PL/NOM</sub> believed her<sub>ACC</sub> all<sub>MASC/PL/NOM</sub> to.be good<sub>ACC</sub>

*They all believed her to be good*

- b. ??Þeir<sub>i</sub> töldu henni ~~Þeir~~<sub>i</sub> allir<sub>i</sub> [~~henni~~ líða vel]

They<sub>MASC/PL/NOM</sub> believed her<sub>DAT</sub> all<sub>MASC/PL/NOM</sub> to-feel<sub>QUIRKY</sub> well

*They all believed her to feel well*

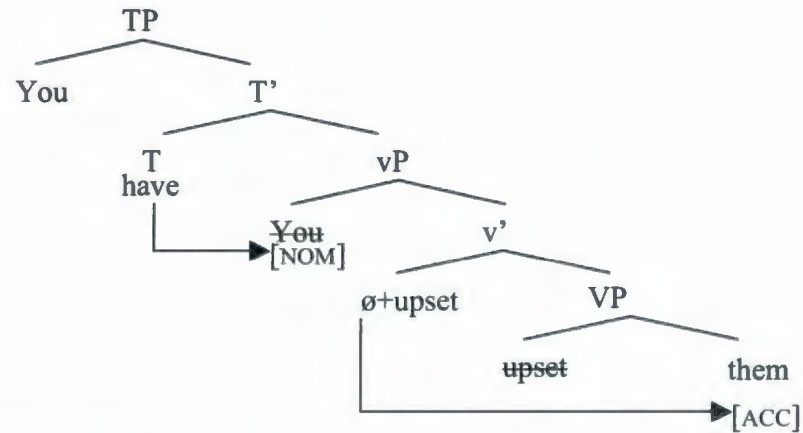
In example (86b), repeated from (85b), the Quirky ECM subject *henni* cannot raise as its non-Quirky counterpart in (86a) does. In order to account for these findings, certain adjustments must be made to the structural theory currently adhered to.

## 6.1 CASE ASSIGNMENT

Given the assumptions outlined above, it is necessary to examine a modern theory of case assignment. According to Radford (2004), nominative and accusative case are assigned by the functional heads T and v respectively. This is detailed in (87) below.



(87)

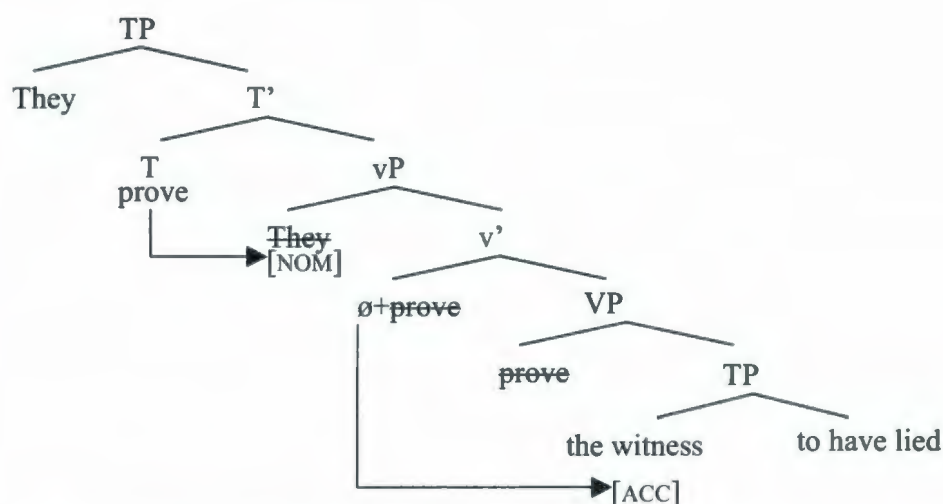


First, the null light verb in the head of *v* assigns accusative case to the closest available goal within its c-commanding domain. Due to the affixal nature of the null light verb, the lexical verb in *V* is raised to head the *vP*. Next *T*, containing the auxiliary *have*, probes for the nearest available goal. Since *you*, located in the specifier position of *v*, has an unvalued case feature and is located within the c-commanding domain of *T* it is a licit goal for the probing *T*; thus, it values *you* with nominative case. Subsequently, in order to satisfy the EPP feature in *T*, *you* raises to SpecTP. From here the derivation of the phrase proceeds normally by merging with a null complementizer. As for case assignment this tree represents the standard mode of derivation.

Expanding on this idea of case assignment, we might expect the current method able to be extended to account for ECM constructions in English. Observe how a basic ECM structure can be described under this analysis.



(88)



Similar to the basic sentence given in (87) above, in (88) case is assigned as follows. The null light verb located in *v* assigns accusative case to the nearest available goal which, in this instance, is the DP *the witness* located in the specifier position of the lower TP. From here the derivation proceeds as expected with nominative case being assigned to *they* since it is the closest available goal to the probing T.

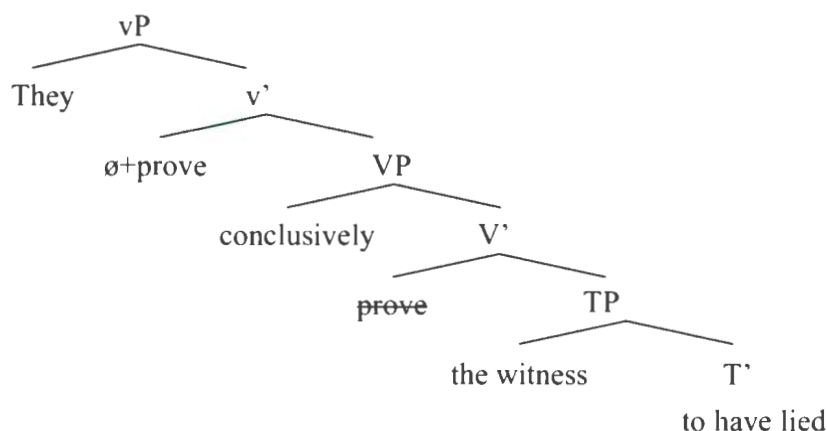
The problem with this analysis arises when we take the adjunction of an adverb into account. For example, Bowers (1993) offers the following type of sentence for examination.

(89) They proved the witness *conclusively* to have lied.

In this example, the adverb *conclusively* modifies the matrix verb *proved*, signifying that it must be an adjunct of the higher VP. However, the ECM subject *the witness* surfaces to the left of this VP adjunct. The question at this point becomes how to structurally

account for this leftward movement of the embedded ECM subject? As the theory currently stands the derivation of (89) will be as follows:

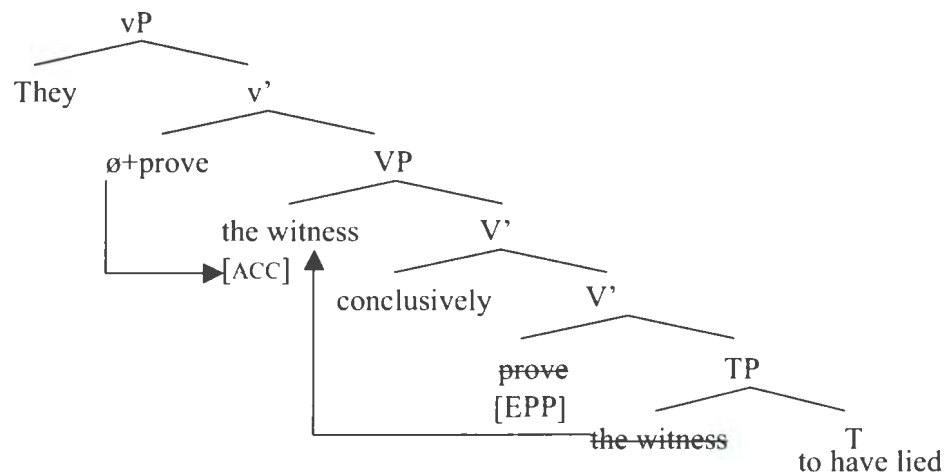
(90)



This tree structure yields an incorrect word order since *the witness* remains in the specifier position of the lower TP below the adjunctive adverb *conclusively*. Raising the matrix verb *prove* above the adverb is problem-free since it will always raise adjoining to the null affixal light verb in *v*. However under the current analysis, there is no motivation for the lower embedded subject *the witness* to raise.

In order to account for the shortcomings of the current theory, it might be suggested that *V* contains an EPP feature that needs to be checked. This means that the lower ECM subject will be probed and selected to raise to an additional SpecVP projection above the adverbial adjunct *conclusively*. This modification to the derivation of (90) is given in (91) below.

(91)



The crucial difference between examples (90) and (91) is that here we attain the desired word order. By virtue of the ECM subject's unvalued case feature<sup>9</sup>, it is an eligible goal for *V* which now acts as a probe searching to have its EPP feature checked. From this position the null light verb can assign accusative case to *the witness* and the remainder of the derivation can proceed as normal – as if *the witness* were now an object of the matrix clause.

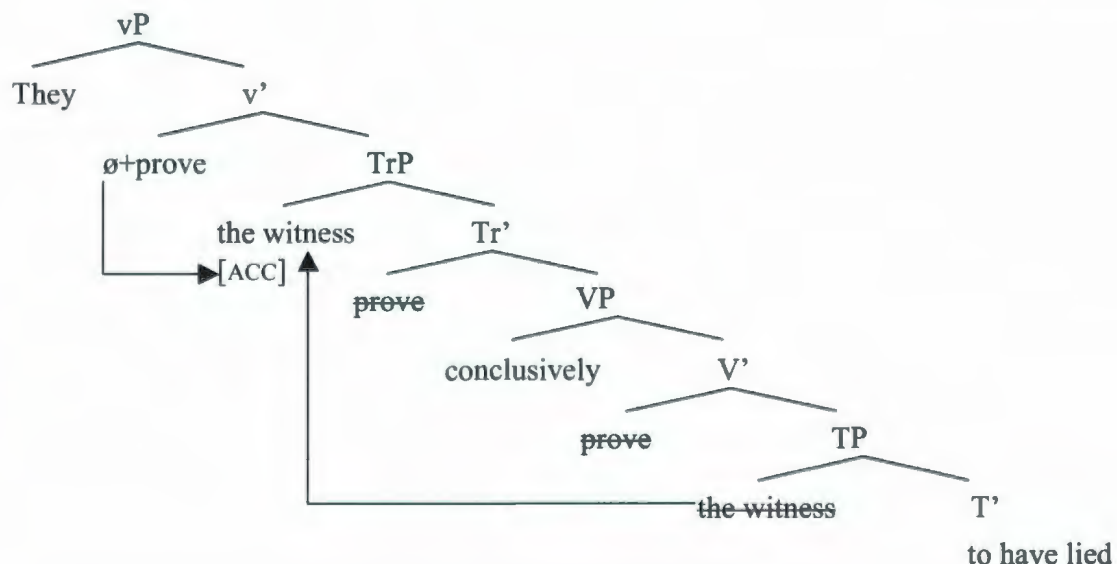
Unfortunately, there remain three problems with this type of analysis which sees an ECM subject raised up into the matrix clause via an EPP located in *V*. First, lexical verbs do not typically have an EPP. This feature is usually found only on functional projections such as *T* and *C*, thus the ad hoc notion of adding this feature to Exceptional Case Marking verbs is unappealing. Second, when *the witness* raises to become an argument of the matrix *VP* it must somehow carry a second theta-role, or be able to

<sup>9</sup> A non-finite *T* is incapable of assigning case (Radford 2004).

ignore its initial theta-role. This is due to the fact that arguments must be theta-marked; however, because *the witness* originated as the thematic argument of the lower predicate *lied* it will have already been theta-marked. Last, adjunction is a process that inserts an argument into maximal projections. Therefore, when the ECM subject is raised to occupy the highest VP projection, the adverbial adjunct is suddenly in an intermediate position which is unappealing. Due to the problematic nature of this analysis we will now turn to Bowers (1993, 2002) to account for the nature of ECM structures.

Bowers (2002) suggests that an intermediate projection exists between VP and vP that he terms a “Transitivity Phrase” (TrP)<sup>10</sup>. This head is “a distinct substantive category...that may contain phi-features...as well as an EPP-feature” (Bowers 2002). This additional projection is inserted into the tree in (92) below.

(92)



<sup>10</sup> For alternative theories concerning projections between VP and vP, I direct the reader to Travis (1991) and Koizumi (1993, 1995).

As is evident from this revised tree structure, the correct word order is attained. The ECM subject is raised to the specifier position of the TrP projection where the null light verb in *v* is able to license the argument's case feature as accusative. From here the derivation proceeds as normal arriving at the desired surface word order.

By positing the TrP projection, Bowers avoids the three caveats attested in the previous analysis. The TrP can contain an EPP-feature<sup>11</sup>, and concerning theta-marking, the ECM subject does not need to receive a second theta-role since it is no longer raised to a position within a lexical projection. Finally, because the raised ECM subject no longer has to surface within VP, the adverbial adjunct can remain in a maximal projection while still yielding a grammatical word order.

From this I will maintain that movement of the embedded ECM argument to a higher matrix clause position is in fact a type of Object Shift (evidence for which will be discussed in Section 6.2 below). In order to facilitate the height requirements necessary to satisfy these analyses, the addition of a head projected above VP is essential. This modification is a crucial step in designing a model of movement that will describe both the English and Icelandic data. Additionally, Object Shift and ECM movement to TrP will necessarily result from the evidence that Tr may contain an EPP-feature as discussed above (Bowers 2002). Therefore, I will continue to employ the TrP in the following discussion of the interplay of Object Shift and Exceptional Case Marking in Icelandic.

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<sup>11</sup> More research is required to fully understand the role of the TrP within the Minimalist framework, and although Bowers (2002) states that the TrP may contain an EPP-feature, it will not be classified as a functional projection for the purposes of this thesis.



## 6.2 THE ARCHITECTURE OF ECM MOVEMENT

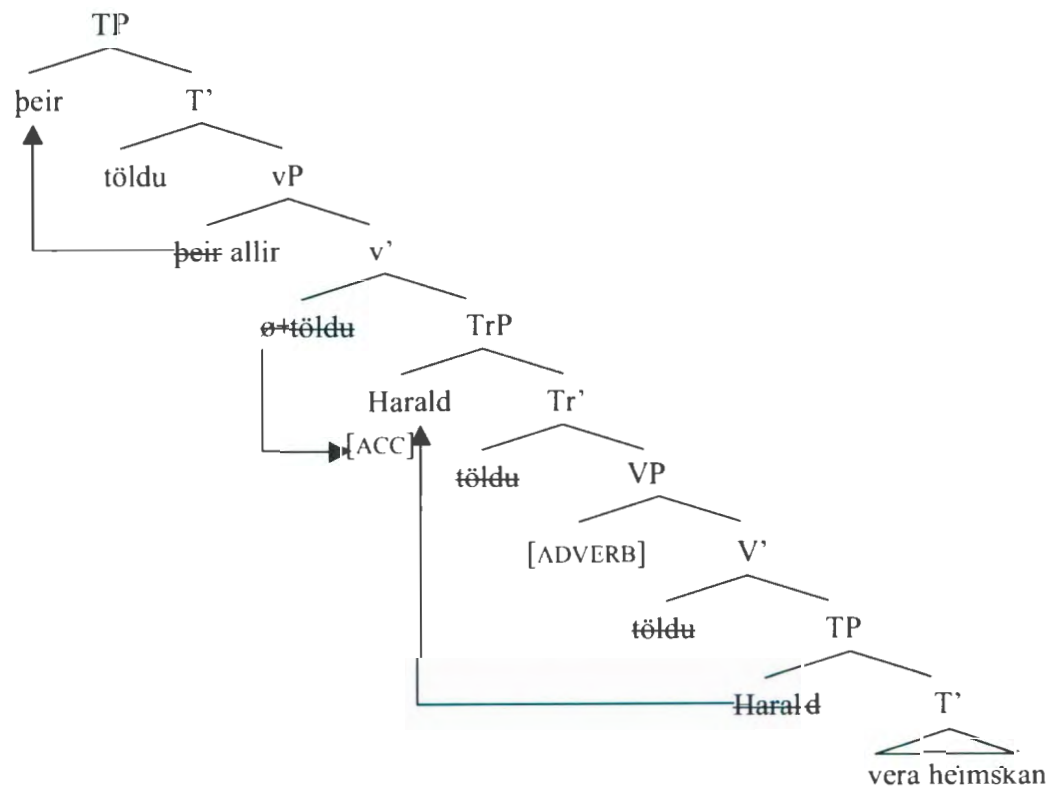
Finally, we can now turn to an investigation of the Icelandic ECM data which will shed light on the nature of ECM movement as a form of Object Shift. In this final analysis, we will see how the Quirky/non-Quirky dichotomy is used to highlight both the final surface position of ECM subjects, and the need for a rule restricting how these arguments arrive at their final surface positions.

First let us see how a standard non-Quirky ECM subject will undergo movement in the theory currently being proposed.

(93) Þeir töldu allir Harald vera heimskan

They<sub>NOM/PL:M</sub> believed all<sub>NOM/PL:M</sub> Harald<sub>ECM-ACC</sub> to.be foolish<sub>ACC</sub>

*They all believed Harold to be foolish*



Similarly to English, the Icelandic ECM subject in (93) is first raised to SpecTrP in order to satisfy the head's EPP-feature. Tr selects *Harald* as its goal because it is the closest available (phi-incomplete) argument available. Once *Harald* reaches SpecTrP it can be assigned structural accusative case by the null light verb in v. As normal, the matrix subject *Þeir allir* is base generated in Spec-vP and receives structural nominative case from the finite T. In order to satisfy T's EPP-feature, *Þeir* is selected by virtue of being the closest available argument within T's c-commanding domain. It should be noted that the subject quantifier *allir* has been stranded in situ in this instance. The position of the stranded quantifier can therefore be used to identify the original position of the matrix subject. From here the sentence is able to converge as in English with the ECM subject raising as high as the matrix TrP.

Unlike English, however, Icelandic ECM subjects can surface to the left of the stranded subject quantifier. Therefore, in Icelandic, ECM subjects must be able to raise above the base position of the matrix subject; they undergo Object Shift. In example (94), we see that the ECM subject occupies a position to the left of the stranded subject quantifier *öll*.

(94) Við<sub>i</sub> teljum fiskinn<sub>j</sub> t<sub>i</sub> öll<sub>i</sub> t<sub>j</sub> hafa verið étinn

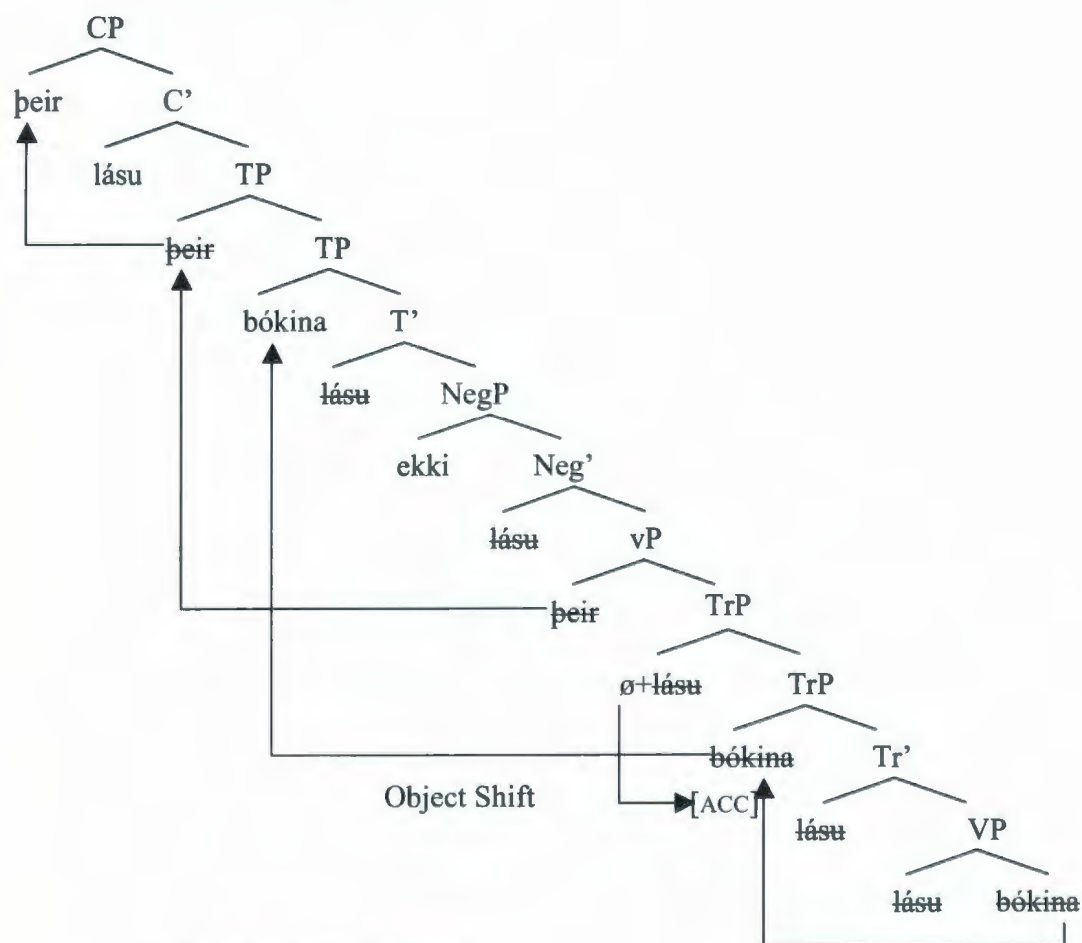
We<sub>NOM/PL</sub> believe fish-the<sub>ECM-ACC</sub> all<sub>NOM/PL</sub> to.have been eaten

*We all believe the fish to have been eaten*

The analysis as it currently exists is capable of accounting for the height of ECM subjects in English and Icelandic that raise above matrix VP adjuncts, but it is not yet strong enough to account for the higher surface positions available in Icelandic.

Therefore, the analysis of ECM movement to TrP is not sufficient enough to account for the Icelandic data given in (94) above. It is at this point in the analysis where I will appeal to the notion of Object Shift to unite the Icelandic data with the current theory. Recall the theory of Object Shift discussed above that saw an argument raised from some position below vP across the base position of the subject to a secondary specifier position in TP. This notion is exemplified in (95) below.

## (95) Non-Quirky Object Shift



þeir lásu bókina<sub>i</sub> ekki t<sub>i</sub>

They read book-the not

*They did not read the book*

Based on this structure, I propose that Object Shift be defined as the object movement that takes place from SpecTrP to a secondary SpecTP position.

There is additional evidence that the secondary ECM movement observed in (94) is also Object Shift. In (96a) below, the secondary raising operation is prohibited when

an auxiliary verb occupies the matrix T position. This mirrors the behaviour of main clause Object Shift discussed above.

(96) a. \*Við<sub>i</sub> höfum fiskinn<sub>j</sub> talið t<sub>i</sub> öll<sub>i</sub> t<sub>j</sub> hafa verið étinn

We<sub>NOM/PL</sub> have fish-the<sub>ACC SG</sub> believed all<sub>NOM/PL</sub> to.have been eaten

b. Við<sub>i</sub> höfum talið t<sub>i</sub> öll<sub>i</sub> fiskinn hafa verið étinn

We<sub>NOM/PL</sub> have believed all<sub>NOM/PL</sub> fish-the<sub>ACC/SG</sub> to.have been eaten

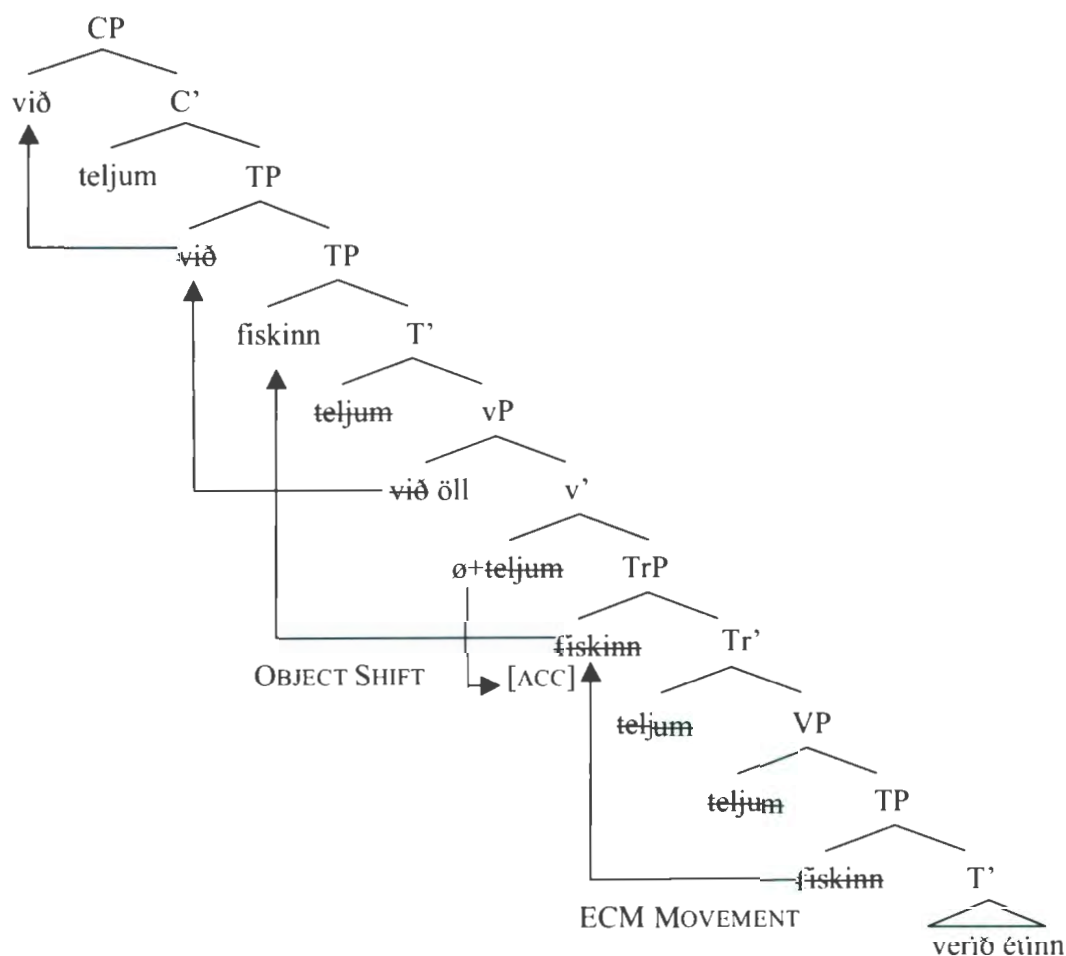
*We have all believed the fish to have been eaten*

In this instance the ECM subject is restricted from raising across the base position of the subject. I argue that this is due to the fact that there is no V-to-T movement of the matrix verb which blocks Object Shift in main clauses as well as in this ECM environment.

Following from this, I posit that the structure of the ECM sentence in (94) ought to be accounted for via a combined ECM-Object Shift analysis in (97).



## (97) Non-Quirky ECM-Object Shift



Við<sub>i</sub> teljum fiskinn<sub>j</sub> t<sub>i</sub> öll t<sub>j</sub> verið étinn

We<sub>NOM, PL, N</sub> believe fish-the<sub>ECM-ACC</sub> all<sub>NOM PL, N</sub> t<sub>0</sub> have been eaten

*We all believe the fish to have been eaten*

The derivation of this sentence will take place as usual, with the exception of one additional movement employed to account for the final height of ECM subjects in Icelandic. This is achieved via a form of Object Shift from SpecTrP to a secondary

specifier position of the matrix TP. Following from this notion of a combined ECM-Object Shift movement, we are able to structurally account for the height of standard Non-Quirky ECM movement in Icelandic.

Let us now turn to the behaviour of Quirky arguments in Object Shift and ECM environments. From this comparison an unexpected dichotomy will come to light with regard to the underlying structure of Quirky Object Shift and the final height of ECM subjects. Recall that a non-Quirky object is able to undergo Object Shift when the main verb has raised V-to-T. This is also the case for Quirky objects as demonstrated in (98) below.

(98) *Þeir<sub>i</sub> gleymdu<sub>j</sub> hestinum<sub>k</sub> [ekki t<sub>i</sub> allir<sub>i</sub> t<sub>j</sub> t<sub>k</sub>]*

*They<sub>NOM/PL/M</sub> forgot<sub>QUIRKY</sub> horse-the<sub>QUIRKY-DAT</sub> not all<sub>NOM/PL/M</sub>*

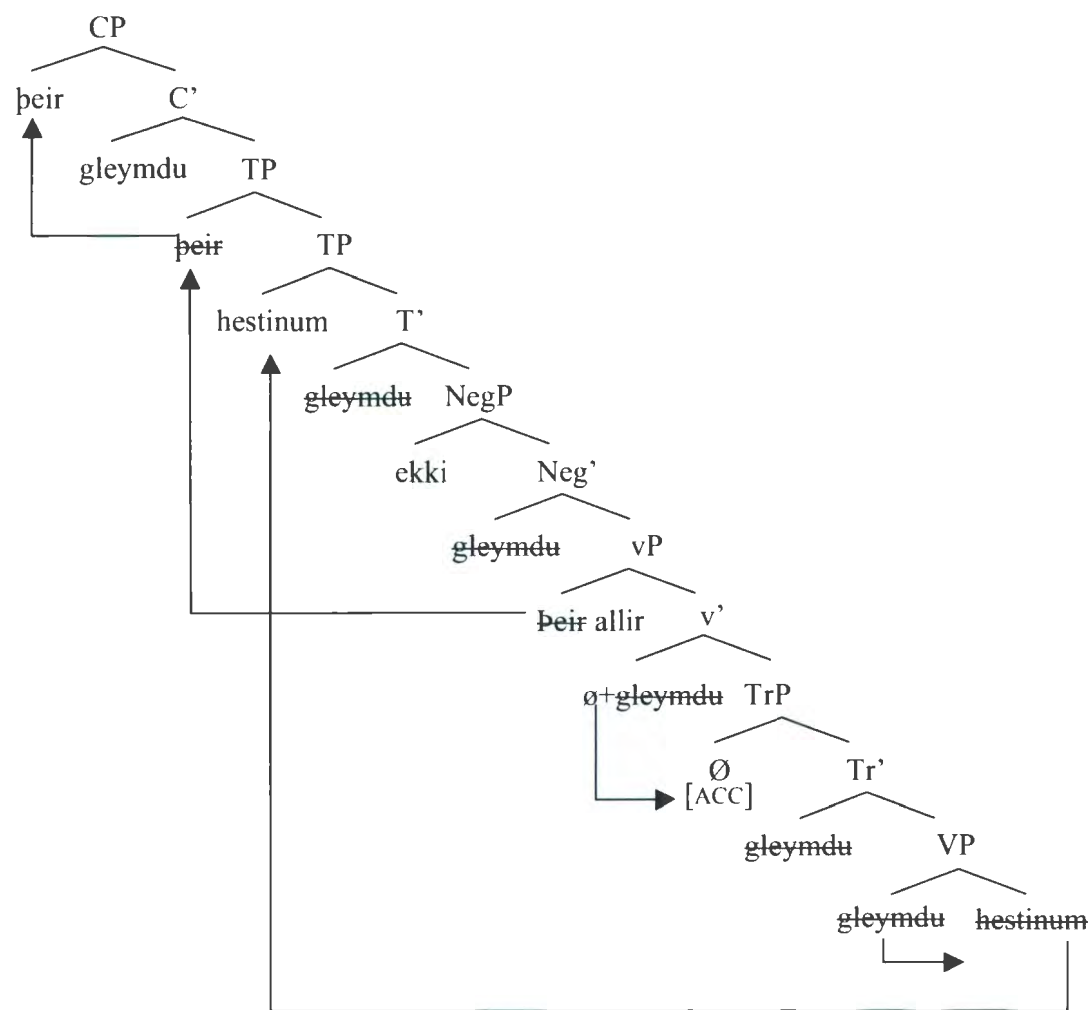
*They didn't all forget the horse*

On the surface, it appears as if this example of main clause Quirky Object Shift is parallel to the non-Quirky example given in (95) above. However, if we take a closer look at the underlying structure of this sentence an interesting distinction will emerge.

Unlike Object Shift of non-Quirky nominals outlined in (95) above, a Quirky object will receive its case VP-internally (lexical case assignment). Because case is assigned to the object in its base position, there will be no motivation for the object to raise to specTrP to receive structural accusative case. Therefore, in order to obtain the word order attested in (98), I propose an addendum to my initial definition of Object Shift; namely, that Object Shift involving Quirky nominals takes place from the

complement of VP to a secondary SpecTP position. This has been reflected in the structure given below.

(99) Quirky Object Shift



QUIRKY OBJECT SHIFT

þeir<sub>i</sub> gleymdu hestinum<sub>j</sub> ekki t<sub>i</sub> allir t<sub>j</sub>

They<sub>NOM/PL/M</sub> forgot horses-the<sub>QUIRKY-DAT</sub> not all<sub>NOM/PL/M</sub>

*They didn't all forget the horses*

Turning to ECM constructions next, recall that a non-Quirky ECM subject is capable of raising as high as the secondary specifier position of the matrix TP. Given the surface-level parallel between non-Quirky and Quirky Object Shift in main clauses just discussed, we might expect the surface positions of Quirky ECM subjects to mirror their non-Quirky counterparts. Surprisingly, this is not the case as evidenced from the awkwardness of sentence (100b) below.

(100)a. Þeir<sub>i</sub> töldu<sub>j</sub> t<sub>i</sub> allir<sub>i</sub> t<sub>j</sub> henni líða vel

They<sub>NOM/PL/M</sub> believed all<sub>NOM/PL/M</sub> her<sub>QUIRKY-DAT</sub> to.feel<sub>QUIRKY</sub> well

b. ??Þeir<sub>i</sub> töldu<sub>j</sub> henni<sub>k</sub> t<sub>i</sub> allir<sub>i</sub> t<sub>j</sub> t<sub>k</sub> líða vel

They<sub>NOM/PL/M</sub> believed her<sub>QUIRKY-DAT</sub> all<sub>NOM/PL/M</sub> to.feel<sub>QUIRKY</sub> well

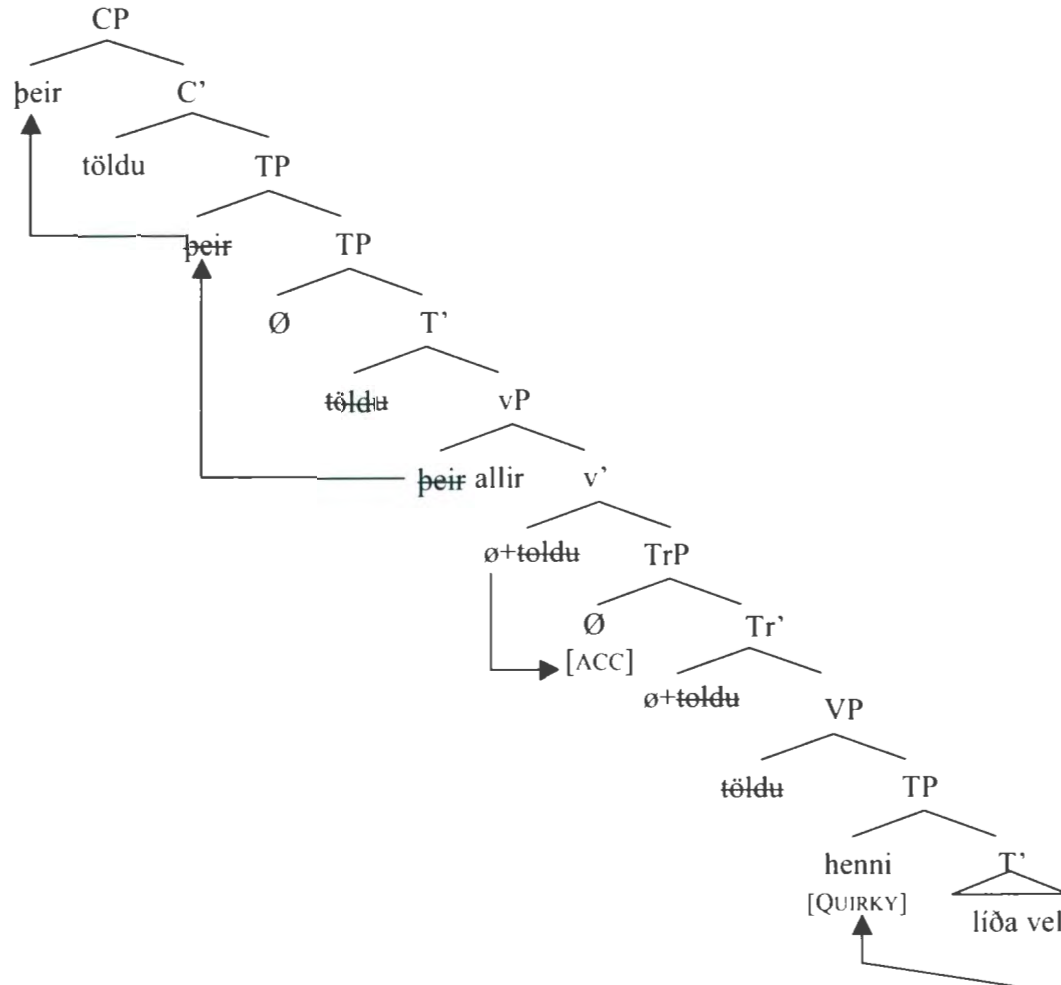
*They all believed her to feel well*

The Quirky ECM subject in (100b) is prohibited from surfacing to the left of the matrix subject quantifier. In (100a), however, we observe that when the ECM subject is not moved past the in situ subject quantifier a clearly grammatical sentence results. Having established the notion that Quirky subjects qualify as true subjects by passing the subjecthood tests outlined in Chapter 2, what underlying characteristics of (100b) make raising a Quirky ECM subject past the matrix subject quantifier ungrammatical? It is important to note here that I am not arguing for a reanalysis of the subject status of Quirky nominals, this is a notion that has been well proven. I am, however, arguing that lexical case assignment affects both the underlying and surface structures of Quirky ECM constructions.

The cause for the height differences observed between Quirky and non-Quirky ECM subjects can be traced back to the behaviour of Quirky objects in Object Shift environments. Recall that when Object Shift affects a Quirky object, that object will bypass the SpecTrP position by virtue of already having been assigned case lexically within VP (see example (99)). With this concept in mind, we can now examine the syntactic structures of the Quirky ECM sentences given in (100a-b) above, and determine what causes one to be grammatical and the other to be ungrammatical.



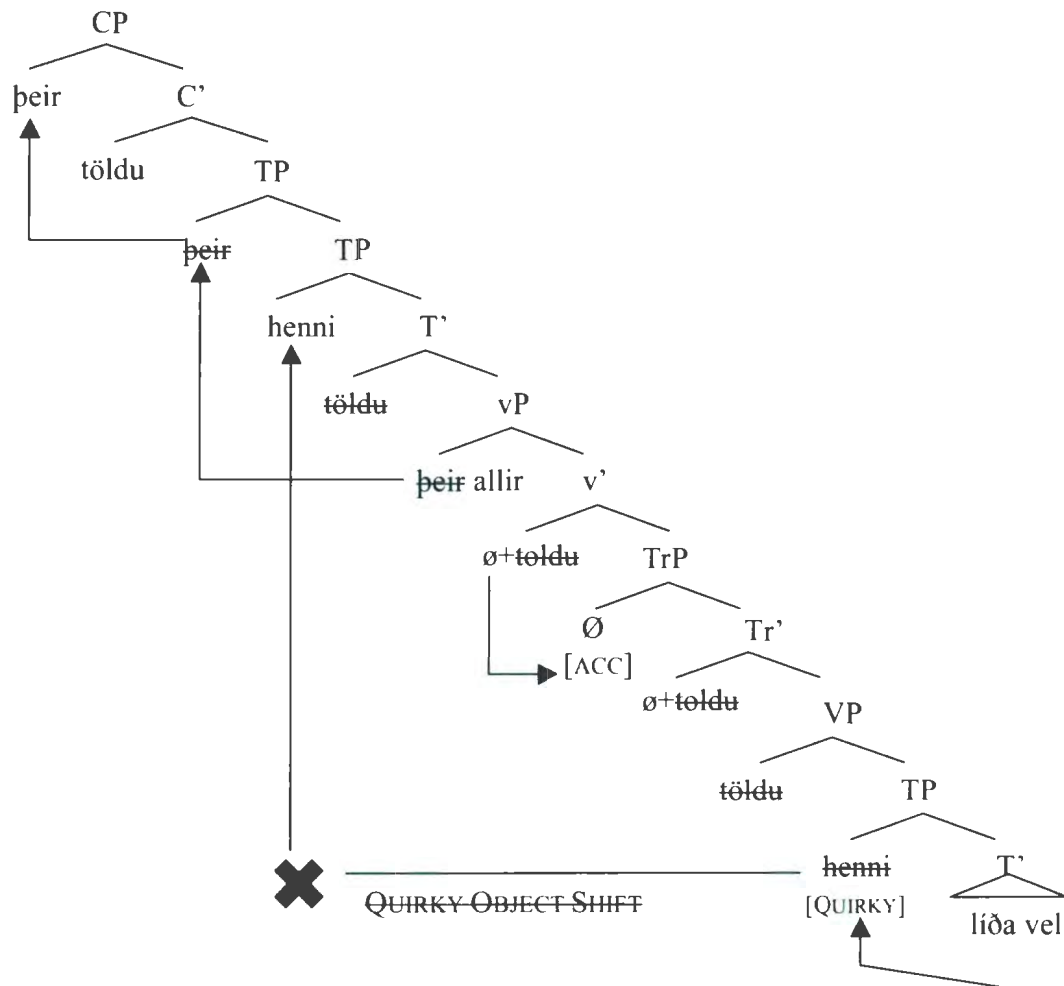
## (101a) Grammatical Quirky ECM-Object Shift



Notice that by the time *henni* gets to the lower SpecTP position, it will have already been assigned an oblique case by the embedded Quirky verb *líða*. Just as we observed in Quirky Object Shift constructions, the Quirky ECM argument has no motivation to raise to SpecTrP since its case feature has already been licensed with a Quirky case. Unlike a

Quirky Object Shift construction, however, a Quirky ECM argument cannot simply raise past SpecTrP and occupy a secondary matrix SpecTP position. This illicit derivation is given in (101b) below.

(101b) Ungrammatical Quirky ECM-Object Shift



??Þeir töldu henni allir líða vel

They<sub>NOM/PL/M</sub> believed her<sub>QUIRKY-DAT</sub> all<sub>NOM/PL/M</sub> to feel<sub>QUIRKY</sub> well

*They all believed her to feel well*

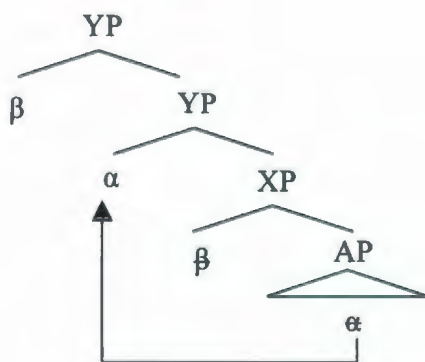
By comparing the syntactic structures of main clause Quirky Object Shift constructions (99) with Quirky ECM-Object Shift (101a-b), we have found that, in the latter, raising the Quirky argument over the SpecTrP to a secondary TP specifier position is disallowed. Therefore, the question now becomes why the matrix T does not select the lexically case marked ECM subject in (101b) to occupy a secondary specifier position as it did in the Quirky main clause Object Shift example in (99).

Perhaps the reason stems from a potential phase boundary created by the lower TP which the probing matrix T is incapable of penetrating. Employing the Phase Impenetrability Constraint (PIC) falls short however since subject-to-subject raising must presumably be possible in *seem* constructions. In this instance of raising, the higher T must be capable of probing for a goal located within the lower TP. Therefore, we must discount a possible PIC violation as the cause for the lack of SpecTP-to-SpecTP movement in Quirky ECM environments.

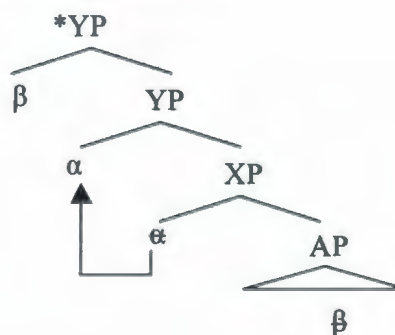
As a novel explanation for the attested data, I propose the following restriction:

- (102) Movement from a primary specifier position of a functional projection to a secondary specifier position of a functional projection is prohibited.

Licit Movement



Illicit Movement

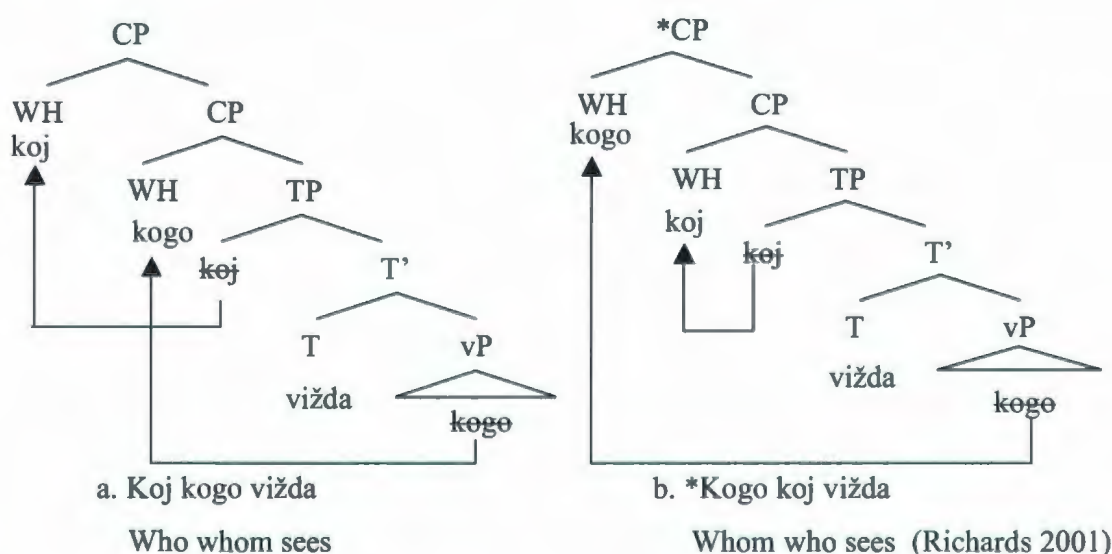


(Where XP and YP are both functional projections and AP is a lexical projection)

In the licit example, movement of  $\alpha$  to YP's secondary specifier is permitted since the movement originated from within a lexical projection, AP. However, in the illicit construction,  $\alpha$  cannot raise to the secondary specifier of YP since this movement originated from the primary specifier position of a functional projection, XP. Following from the restriction given in (102), movement of the type found in the illicit construction will always be deemed ungrammatical.

This rule comes about as an extension to Richards (2001) theory of Wh-movement to multiple specifiers of the same projection. In this scenario, outlined in Section 5.2 above, the notions of Cyclicity and Shortest Move were employed to account for the final order of overtly raised Wh-words in Bulgarian. However, if we implement the restriction on movement from a primary functional specifier position to a secondary functional specifier position in (102), we achieve the same result. This notion becomes clear when we examine the Bulgarian Wh-movement data once more.

(103)



An interesting way of accounting for the constructions in (103) is via a restriction on the movement of the subject Wh-word originating in SpecTP. By employing the rule in (102), that an argument cannot be 'demoted' from a primary to a secondary functional specifier position, we can account for the data quite succinctly. Because the Wh-word *koj* is base generated in a primary functional specifier position (SpecTP), when Wh-movement occurs its only available landing site is the primary SpecCP position, (103a). *Kogo*, on the other hand, is able to occupy a secondary specifier position since it was originally merged within vP – a lexical projection.

Returning to the Icelandic ECM data in (104) below, it is now possible to account for the height differences observed between Quirky and non-Quirky ECM subjects via the rule given in (102).





argument in (104a) will be permitted to raise to a secondary matrix SpecTP position since it is moving from SpecTrP<sup>12</sup>. Conversely, the Quirky ECM subject in (104b) that remains in the embedded SpecTP (by virtue of having received lexical case) cannot raise past the base position of the matrix subject to the secondary specifier of the higher TP. The only way for the Quirky ECM subject to raise this high without violating the restriction on specifier movement outlined in (102) would be to first move to a lexical specifier position or a secondary functional specifier position.

It is evident that more research is needed regarding the nature of the TrP projection and its role within the minimalist program, however the interplay of morphological case assignment and syntactic movement described above presents a new means of accounting for the disparate Icelandic ECM data. Furthermore, the proposed restriction on specifier movement is valuable for scholarship beyond the scope of the Icelandic problem. For example, the restriction might also account for Japanese local scrambling type constructions where two arguments can be raised to the front of a phrase in any order. This is demonstrated below.

(105)a. Gakusei-ni<sub>i</sub> hon-o<sub>j</sub> Taroo-ga t<sub>i</sub> t<sub>j</sub> ageta

Student-DAT book-ACC Taroo-NOM gave

b. Hon-o<sub>j</sub> gakusei-ni<sub>i</sub> Taroo-ga t<sub>i</sub> t<sub>j</sub> ageta

Book-ACC student-DAT Taroo-NOM gave

Taroo gave a book to the student

(Richards 2001)

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<sup>12</sup> The nature of the Transitivity Phrase requires further study, but for the purposes of this thesis, it will be considered a lexical projection.

With regard to Richards' (2001) notions of crossover versus nested movements (see Section 5.2), it seems odd to suggest that in (105a) the movement is motivated by a single projection resulting in a crossover movement, and in (105b) the movement is suddenly motivated by two separate projections causing a nested styled movement. Rather, in these types of constructions, I suggest that the reason either surface order is possible is because neither argument originates in a primary functional specifier position. Therefore there is no restriction on which argument must move to the higher primary specifier position resulting in the two optional word orders attested in (105a-b).

Additionally, this idea can be extended to account for the fact that subjects tend to want to occupy the highest specifier position when movement of multiple arguments is involved. This restriction on movement neatly accounts for this phenomenon.

To summarize, it has been shown that both Quirky and non-Quirky DPs are subject to Object Shift in Icelandic. However, there is no tangible way of distinguishing the two types of movements on the surface – despite the fact that the two arguments take differing syntactic routes to their final positions. Establishing this underlying difference is vital to understanding the more highly complex ECM movement which is argued to be a sub-form of Object Shift. In this instance, an empirical surface height difference was detected that saw non-Quirky ECM subjects raising to a secondary SpecTP position within the matrix clause, and Quirky ECM subjects raising only as far as the lower SpecTP. This then led to a novel restriction on movement from primary functional specifier positions to secondary functional specifier positions that may have further application cross-linguistically. It is evident that the notions of Object Shift and ECM

ought to be reconsidered given the peculiar behaviour of Quirky Icelandic ECM subjects when compared to their non-Quirky standard counterparts. These empirical differences have been reflected in the underlying syntactic structures throughout this chapter with the aim of better understanding the relation between Quirky Case, Object Shift, and ECM constructions.

## CHAPTER 7

# CONCLUSIONS

By unifying the notions of Quirky case, Object Shift, and Exceptional Case Marking, new insights into the interconnected relationship of case and syntactic position have been made. In doing so, the debated nature of ECM complementation has been examined through the lens of the Icelandic language, which has highlighted a disparity concerning the height of Quirky vs. non-Quirky ECM arguments. A means of accounting for this empirical difference has been offered through a novel restriction on certain types of specifier movement.

Although this study has relied on case assignment and height restrictions as the primary method of accounting for the attested Icelandic data, this is not necessarily the only way of describing the syntactic movements involved. For example it has been argued that:

“A movement analysis of subject case assignment is problematic in languages like Icelandic...the overt morphological case marking of objects has no effect on their movability: objects move or do not move irrespective of the kind of morphological case that they carry, be it structurally assigned accusative or nominative, or lexically assigned dative or genitive” (Thráinsson 2007).



However, this thesis has provided an interesting means by which to account for multiple types of movement phenomena found cross-linguistically. Although arguments against the sort of case-based analysis do exist, the novel design presented in this thesis provides data that suggests a re-thinking of both Object Shift and ECM movement.

By examining the interactions between three seemingly unique syntactic concepts: Quirky (oblique) subjects, Exceptional Case Marking, and Object Shift, I have tried to explore the universal relationship between case and syntactic position. In order to achieve this, the morphologically rich Icelandic language with its linguistically rare phenomenon of oblique subjects has been the ideal forum within which this complex relationship has been readily accessible. Through an examination and further application of the Quirky phenomenon, I have provided a new model of the interaction between ECM movement and Object Shift.

## BIBLIOGRAPHY

- Barðdal, Jóhanna and Thórhallur Eythórsson. 2009. The Origin of the Oblique Subject Construction: An Indo-European Comparison. In *Grammatical Change in Indo-European Languages: Papers Presented at the Workshop on Indo-European Linguistics at the XVIIIth International Conference on Historical Linguistics*, eds. Vit Bubenik, John Hewson and Sarah Rose, 179-193. Amsterdam: John Benjamins.
- Bobaljik, Jonathan, and Dianne Jonas. 1996. Subject Positions and the Roles of TP. *Linguistic Inquiry* 27-2: 195-236.
- Boeckx, Cedric. 2000. Quirky Agreement. *Studia Linguistica* 54.3: 354-380.
- Bowers, J. 1993. The Syntax of Predication. *Linguistic Inquiry* 24: 591-656.
- Bowers, J. 2002. Transitivity. *Linguistic Inquiry* 33: 183-224.
- Branigan, Phil. 2000. Binding Effects with Covert Movement. *Linguistic Inquiry* 31: 553-557.
- Branigan, Phil. In press. *Provocative Syntax*. Cambridge: MIT Press.
- Chomsky, Noam. 1970. Remarks on Nominalization. In *Readings in English Transformational Grammar*, eds. R. Jacobs and P. Rosenbaum, 184-221. Waltham, Massachusetts: Ginn and Company.

- Chomsky, Noam. 1981. Lectures on Government and Binding. In *Studies in Generative Grammar*. Dordrecht: Foris Publications.
- Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, eds. Kenneth Hale and Samuel Jay Keyser, 1-52. Cambridge: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.
- Chomsky, Noam. 2001. Derivation By Phase. In *Ken Hale: A Life in Language*, ed. M. Kenstowicz, 1-52. Cambridge: MIT Press.
- Collins, Chris and Höskuldur Thráinsson. 1996. VP-Internal Structure and Object Shift in Icelandic. *Linguistic Inquiry* 27.3: 391-444.
- Hólmarrson, Sverrir, Christopher Sanders, and John Tucker. 2004. *Íslensk-Ensk Orðabók – Concise Icelandic-English Dictionary*. Reykjavík: Íðunn.
- Holmberg, Anders. 1984. On Raising in Icelandic and Swedish. *Working Papers in Scandinavian Syntax* 13: 1-29.
- Holmberg, Anders. 1986. Word Order and Syntactic Features in the Scandinavian Languages and English. Doctoral dissertation, University of Stockholm, Sweden.
- Holmberg, Anders. 1999. Remarks on Holmberg's Generalisation. *Studia Linguistica* 53: 1-39.
- Holmberg, Anders and Christer Platzack. 1995. *The Role of Inflection In Scandinavian Syntax*. Oxford: Oxford University Press.

- Jonas, Dianne. 1992. Checking Theory and Nominative Case In Icelandic. In *Harvard Working Papers in Linguistics*, eds. S. Kuno and H. Thráinsson, 1: 175-195. Department of Linguistics Harvard University, Cambridge, Mass.
- Jónsson, Jóhannes. 1998. A List of Predicates That Take a Quirky Subject in Icelandic. Ms., University of Iceland, Reykjavík.
- Koizumi, Masatoshi. 1993. Object Agreement Phrases and the Split VP Hypothesis. In *MIT Working Papers in Linguistics*, eds. J. D. Bobaljik and C. Phillips, 18: 99-148. MIT Press, Cambridge, Mass.
- Koizumi, Masatoshi. 1995. Phrase Structure in Minimalist Syntax. Doctoral Dissertation, MIT.
- Larson, Richard. 1988. On the Double Object Construction. *Linguistic Inquiry* 19.3: 335-391.
- Lasnik, Howard. 1998. Exceptional Case Marking: Perspectives Old and New. In *Formal Approaches to Slavic Linguistics: The Connecticut Meeting 1997*, eds. Z. Boskovic, S. Franks, and W. Snyder, 187-211. Michigan Slavic Publications.
- Lasnik, Howard, and Mamoru Saito. 1999. *Minimalist Analysis*. Oxford: Blackwell Publishers Ltd.
- Levin, Lori and Jane Simpson. 1981. Quirky Case and Lexical Representations of Icelandic Verbs. *Chicago Linguistics Society* 17: 185-196.
- Pollock, Jean-Yves. 1989. Verb Movement, Universal Grammar, and the Structure of IP. *Linguistic Inquiry*, 20: 365-424.

- Postal, Paul. 1974. *On Raising: One Rule of English Grammar and Its Theoretical Implications*. Cambridge: MIT Press.
- Radford, Andrew. 2004. *Minimalist Syntax: Exploring the Structure of English*. Cambridge: Cambridge University Press.
- Richards, Norvin. 2001. *Movement in language*. New York: Oxford University Press.
- Safir, K. 1993. Perception, Selection, and Structural Economy. *Natural Language Semantics* 2: 47-70.
- Sigurðsson, Halldór. 1989. Verbal Syntax and Case in Icelandic. Doctoral dissertation, Lund University, Sweden.
- Sigurðsson, Halldór. 2002. To Be An Oblique Subject: Russian vs. Icelandic. *Natural Language and Linguistic Theory* 20: 691-724.
- Sportiche, Dominique. 1988. A Theory of Floating Quantifiers and its Corollaries for Constituent Structure. *Linguistic Inquiry* 19: 425-449.
- Thráinsson, Höskuldur, 1979. On Complementation in Icelandic. Doctoral dissertation, Harvard University. Published by Garland, New York.
- Thráinsson, Höskuldur. 2007. *The Syntax of Icelandic*. Cambridge: Cambridge University Press.
- Travis, Lisa deMena. 1991. Derived Objects, Inner Aspect, and the Structure of VP. Paper presented at NELS 22, University of Delaware.
- Ura, Hiroyuki. 2000. *Checking Theory and Grammatical Functions in Universal Grammar*. New York: Oxford University Press.



Vikner, Sten. 1989. Object Shift and Double Objects in Danish. *Working Papers in Scandinavian Syntax* 44: 141-155.

Zaenen, A., J. Maling, and H. Thráinsson. 1985. Case and Grammatical Functions: The Icelandic Passive. *Natural Language and Linguistic Theory* 3: 441-483.



